

Appl. No. 09/839,574; Group Art Unit: 1646
 Int. No. 1530.0180002/EKS/EJH;
 Inventors: Manthorpe *et al.*; Tel: 202/371-2600
 Title: Compositions and Methods for in vivo Delivery of
 Polynucleotide-Based Therapeutics

PLASMID NAME	GENE	PARENTAL PLASMID	PROMOTOR/ ENHANCER	TERMINATOR
VR1223	FIREFLY LUX	VR1012*	CMV	BGH
VR1412	BACTERIAL LACZ	VR1012*	CMV	BGH
VR2901	MOUSE EPO	VR1012*	CMV	BGH
VR2996	MOUSE EPO	VR1012	MV/Desmin	BGH
VR3301	HUMAN SEAP	VR1012*	CMV	BGH
VR3502	RAT PROINSULIN	VR1012*	CMV	BGH
VR4151	HUMAN IFN-OMEGA	VR1055	CMV	mRBC
VR4700	INFLUENZA NP	VR1255**	CMV	mRBC
VR1418	BACTERIAL LACZ	VR1043	RSV	BGH
VR1255	FIREFLY LUX	VR1223	CMV	mRBC
INTERMEDIATE PLASMIDS				
VR1012	NONE	V1J***	CMV	BGH
VR1043	NONE	VR1343	RSV	BGH
VR1055	NONE	VR1255	CMV	mRBC

FIG.1

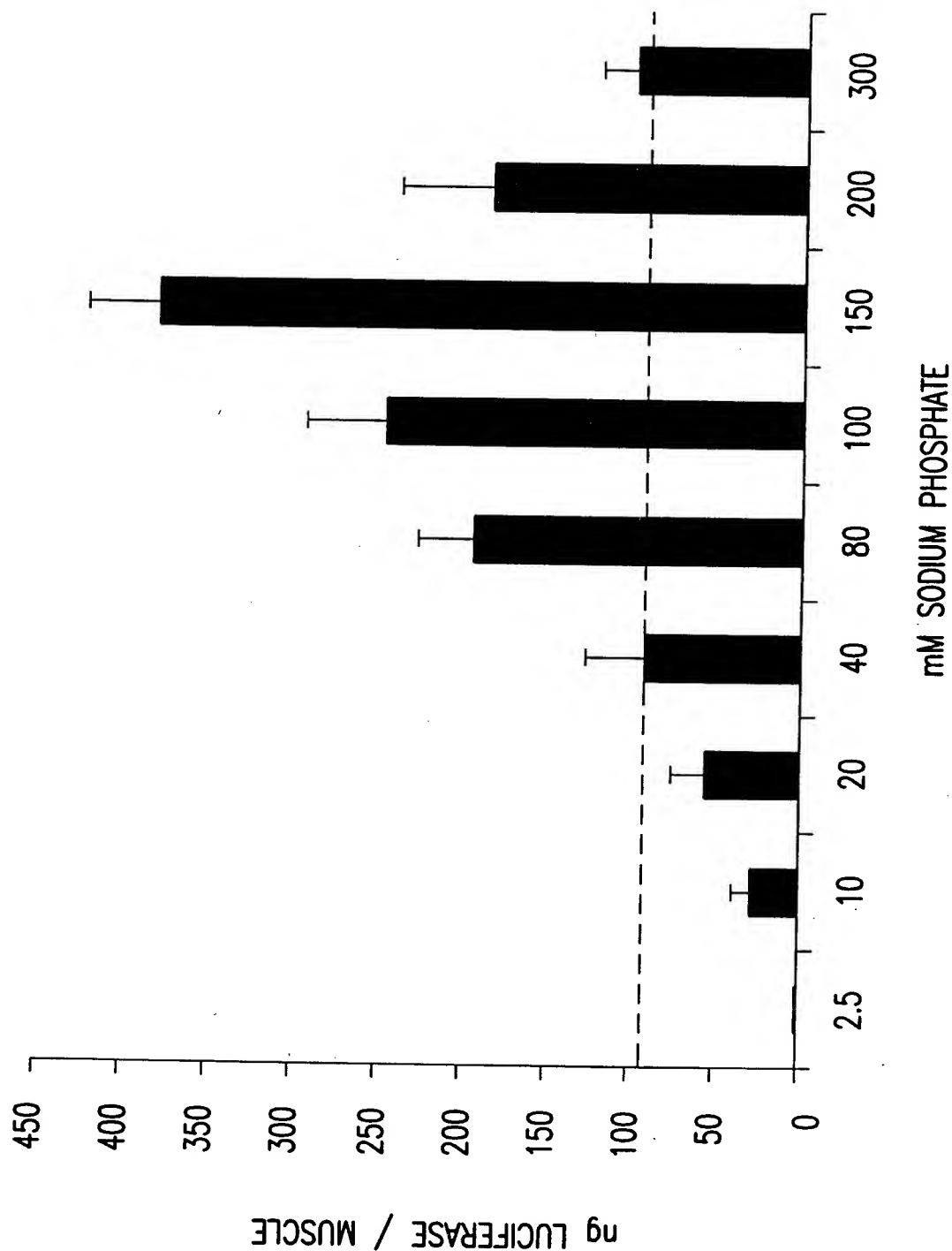


FIG. 2A

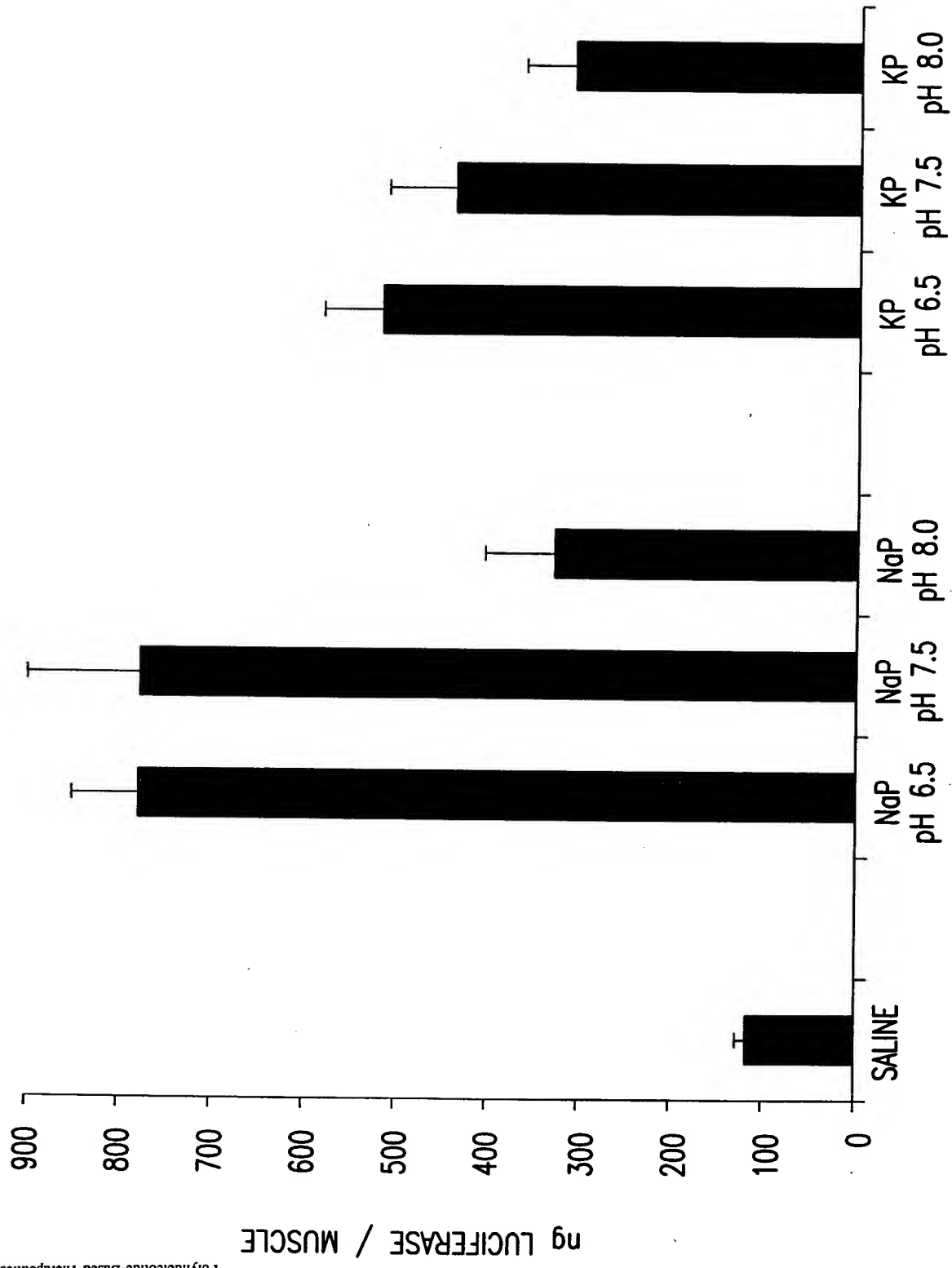


FIG. 2B

44480-4256800

FIG. 2C

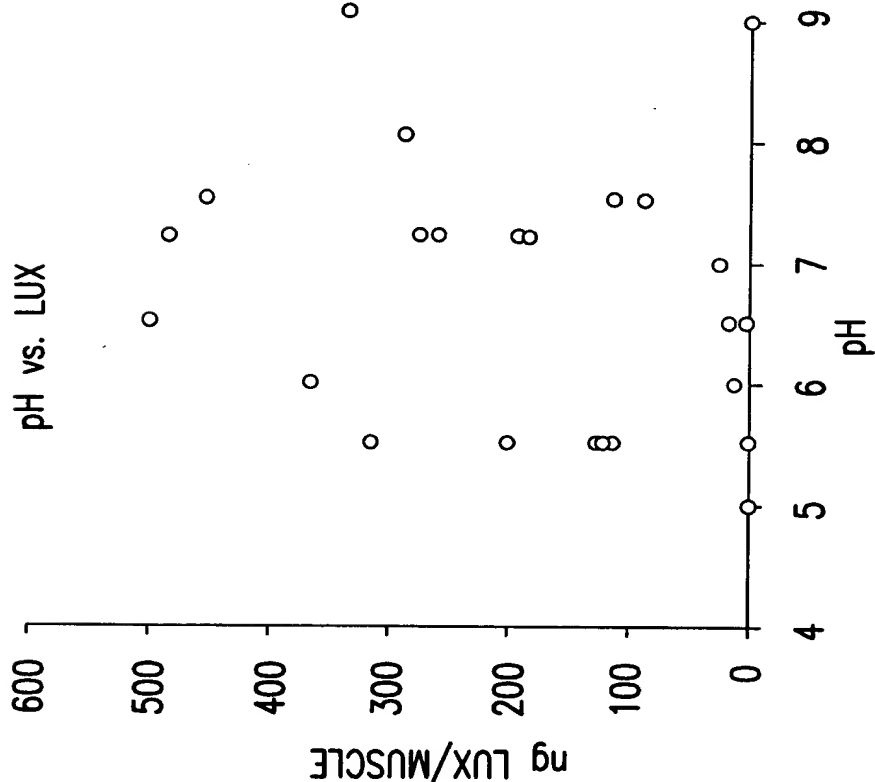


FIG. 2C

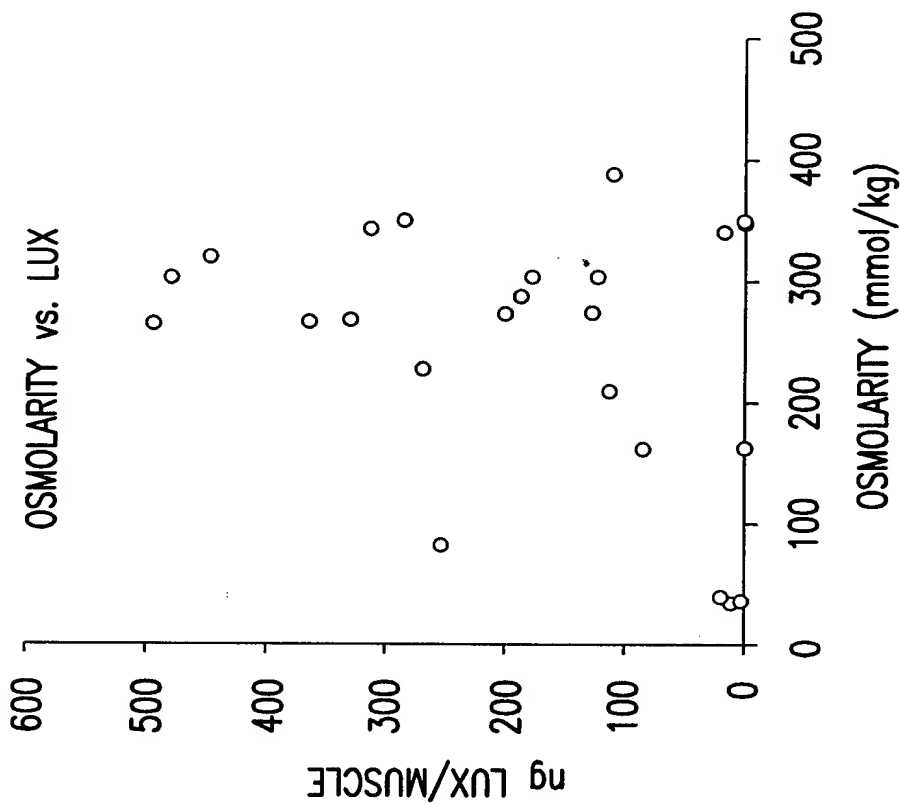


FIG. 2D

Appl. No. 09/839,574; Group Art Unit: 1646
 Dkt. No. 1530.0180002/EKS/EJH;
 Inventors: Manthorpe *et al.*; Tel: 202/371-2600
 Title: Compositions and Methods for in vivo Delivery of
 Polynucleotide-Based Therapeutics

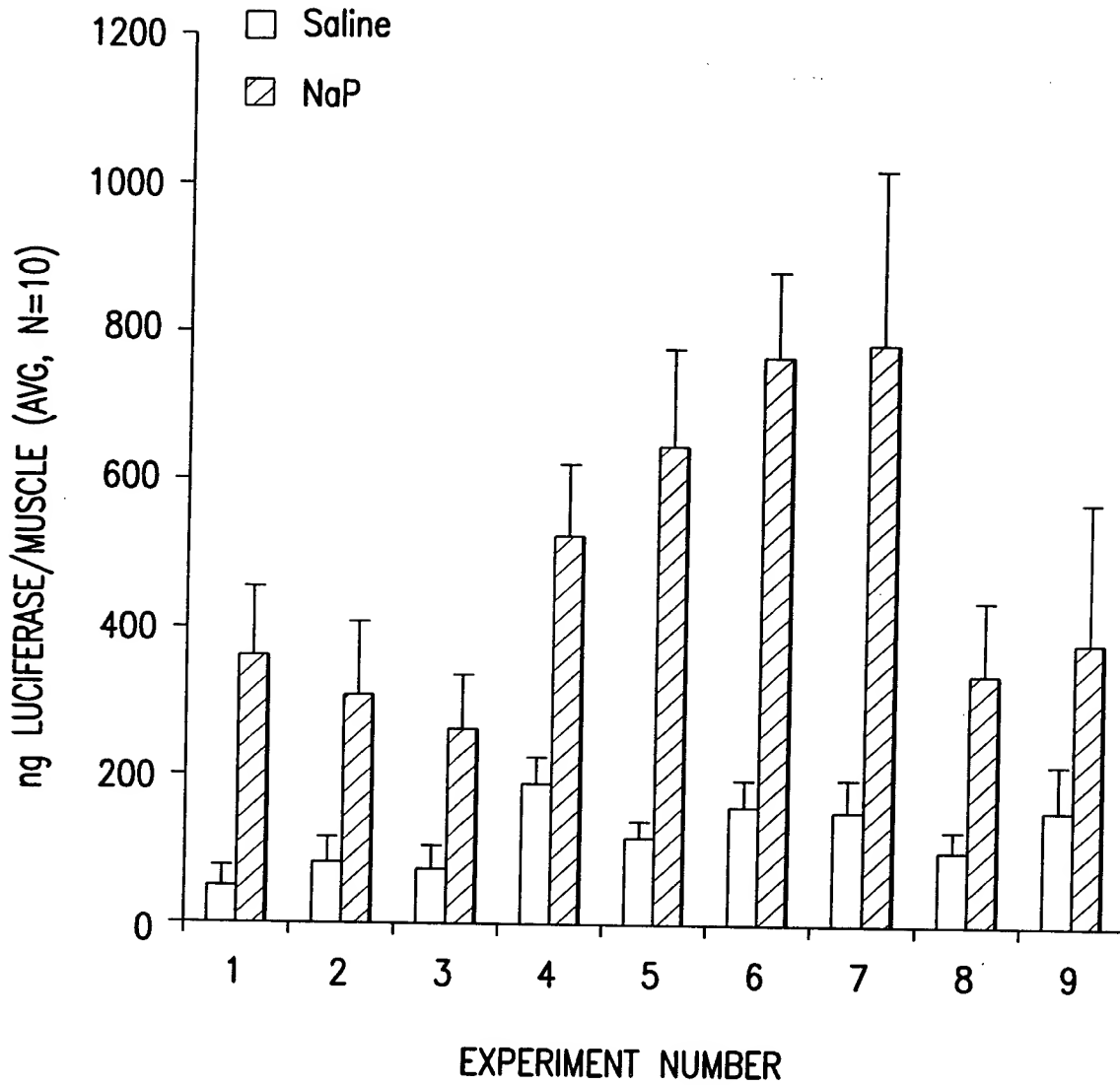


FIG.3

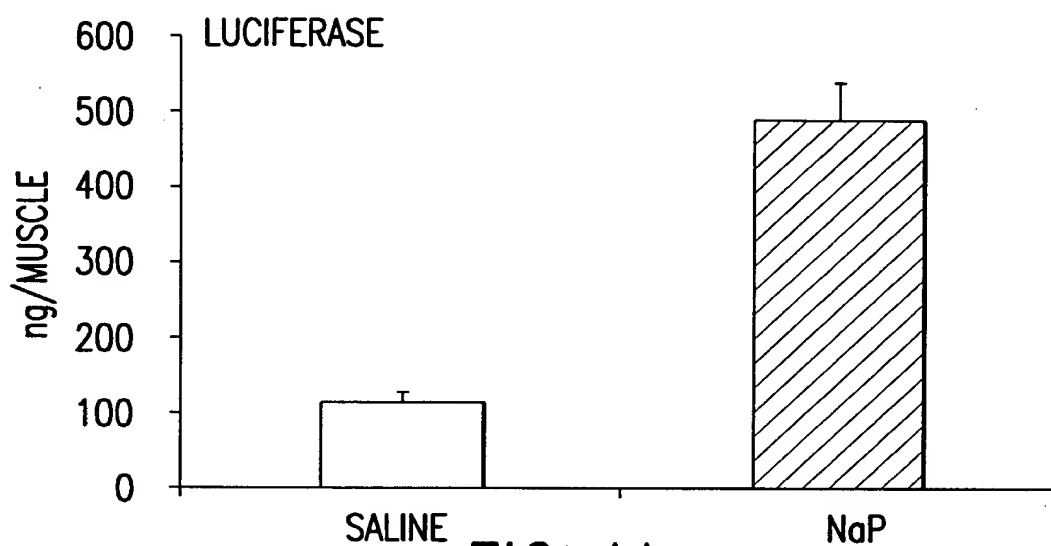


FIG. 4A

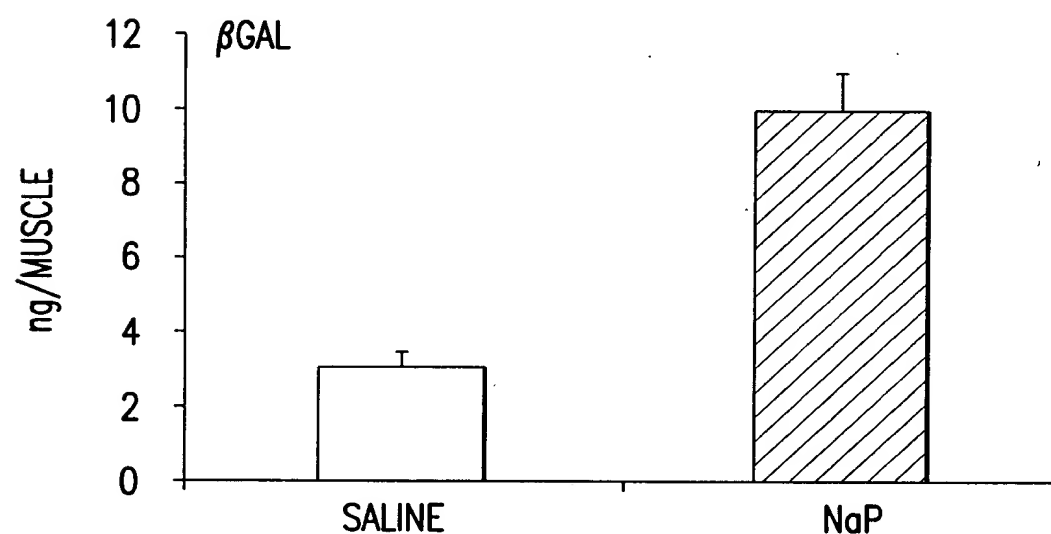


FIG. 4B

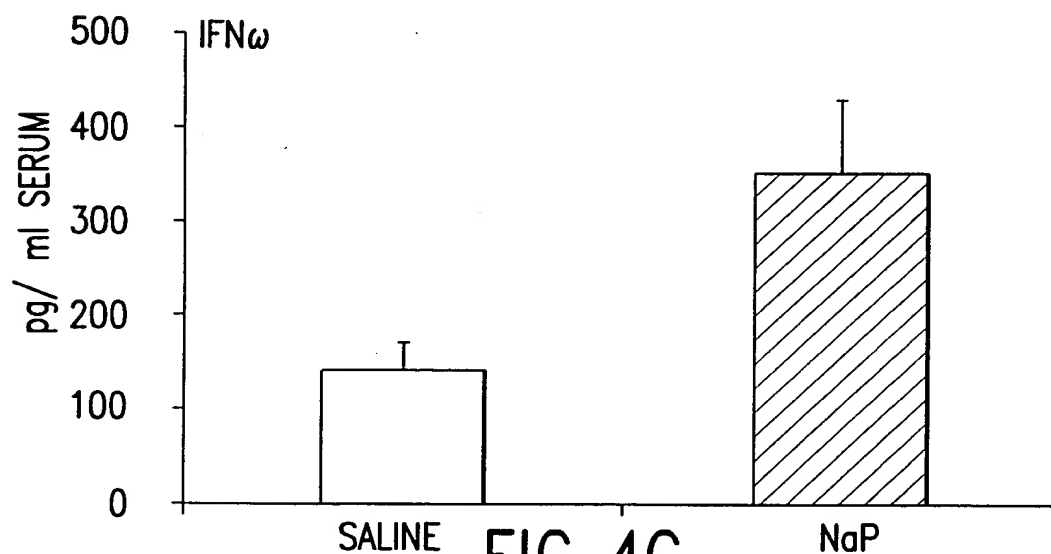


FIG. 4C

09839574-081704
 10/28/00 12:56:56

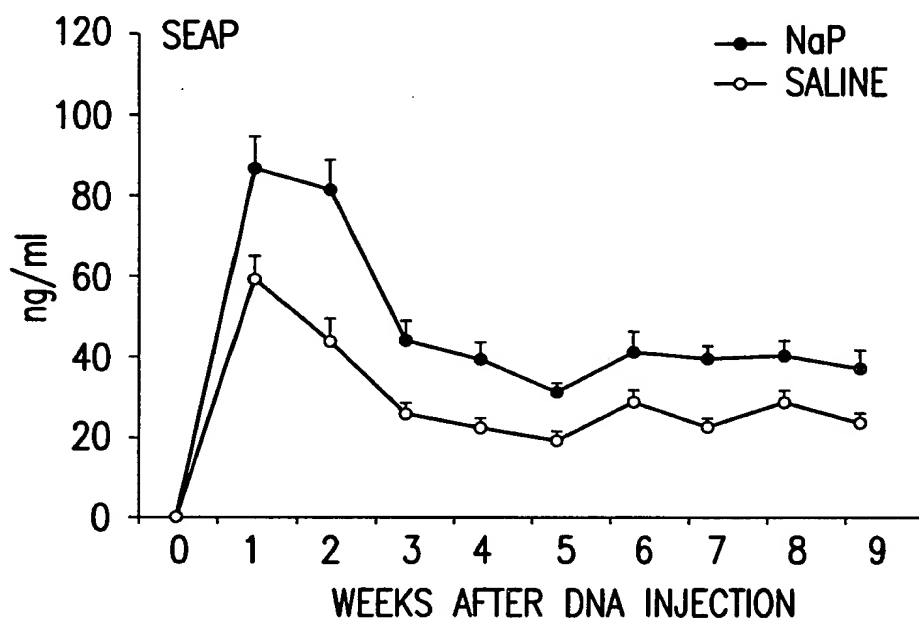


FIG. 5A

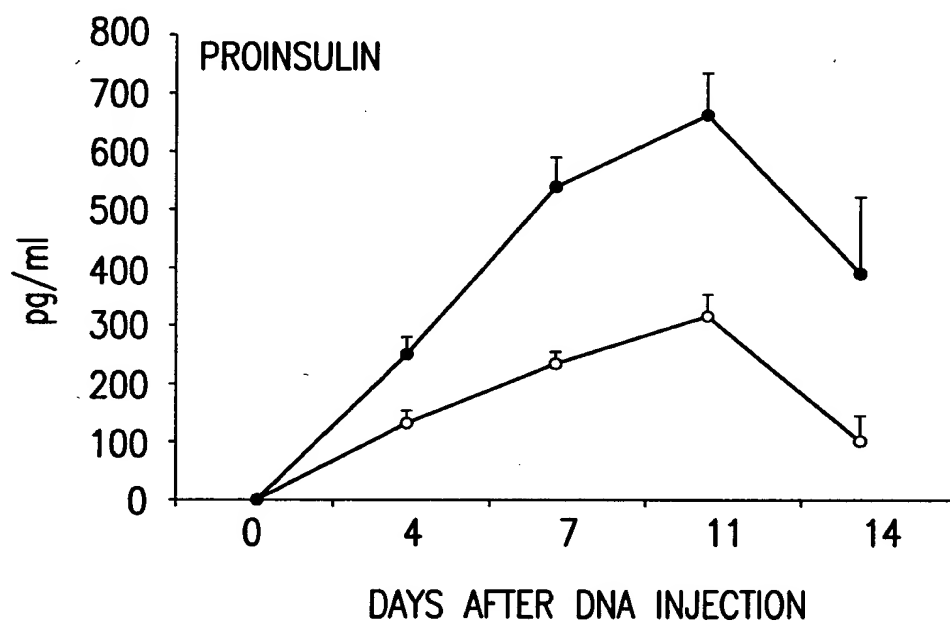


FIG. 5B

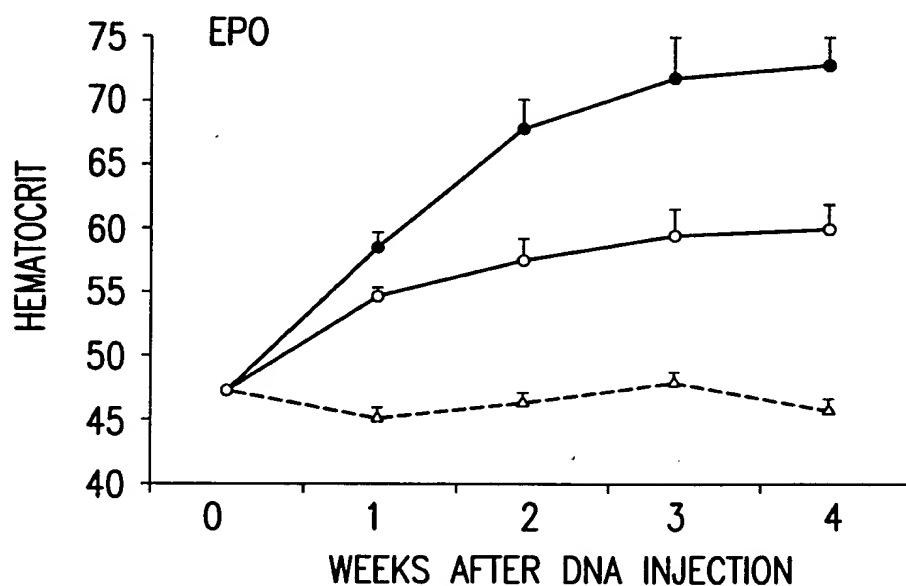


FIG. 5C

09/839,574-001701

Appl. No. 09/839,574; Group Art Unit: 1646
Dkt. No. 1530.0180002/EKS/EJH;
Inventors: Manthorpe *et al.*; Tel: 202/371-2600
Title: Compositions and Methods for in vivo Delivery of
Polynucleotide-Based Therapeutics



FIG. 6A

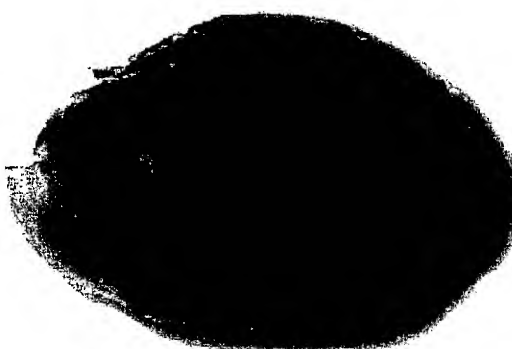


FIG. 6B



FIG. 6C



FIG. 6D

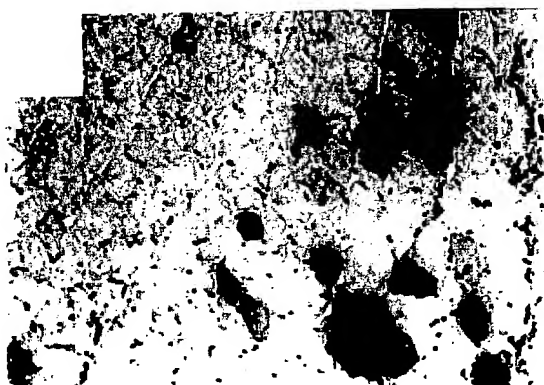


FIG. 6E



FIG. 6F

FOI 2007-04562800

Appl. No. 09/839,574; Group Art Unit: 1646
 Dkt. No. 1530.0180002/EKS/EJH;
 Inventors: Manthorpe *et al.*; Tel: 202/371-2600
 Title: Compositions and Methods for in vivo Delivery o
 Polynucleotide-Based Therapeutics

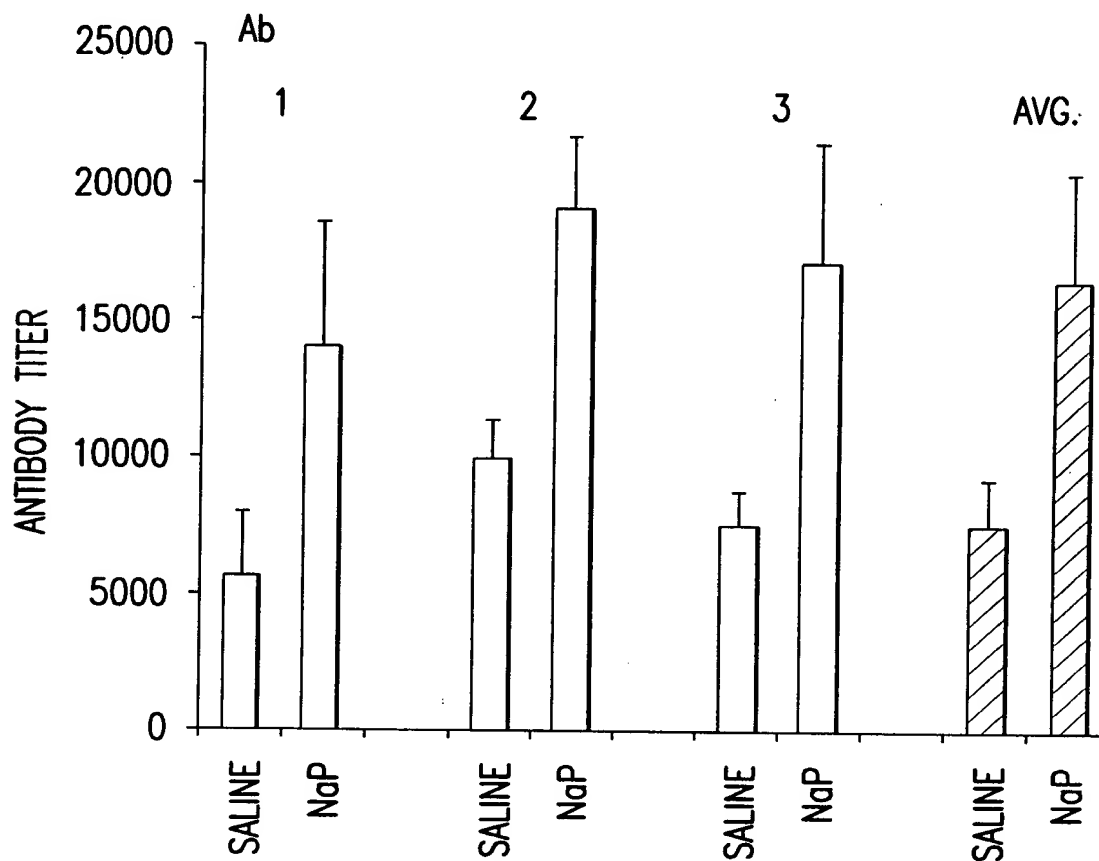


FIG. 7A

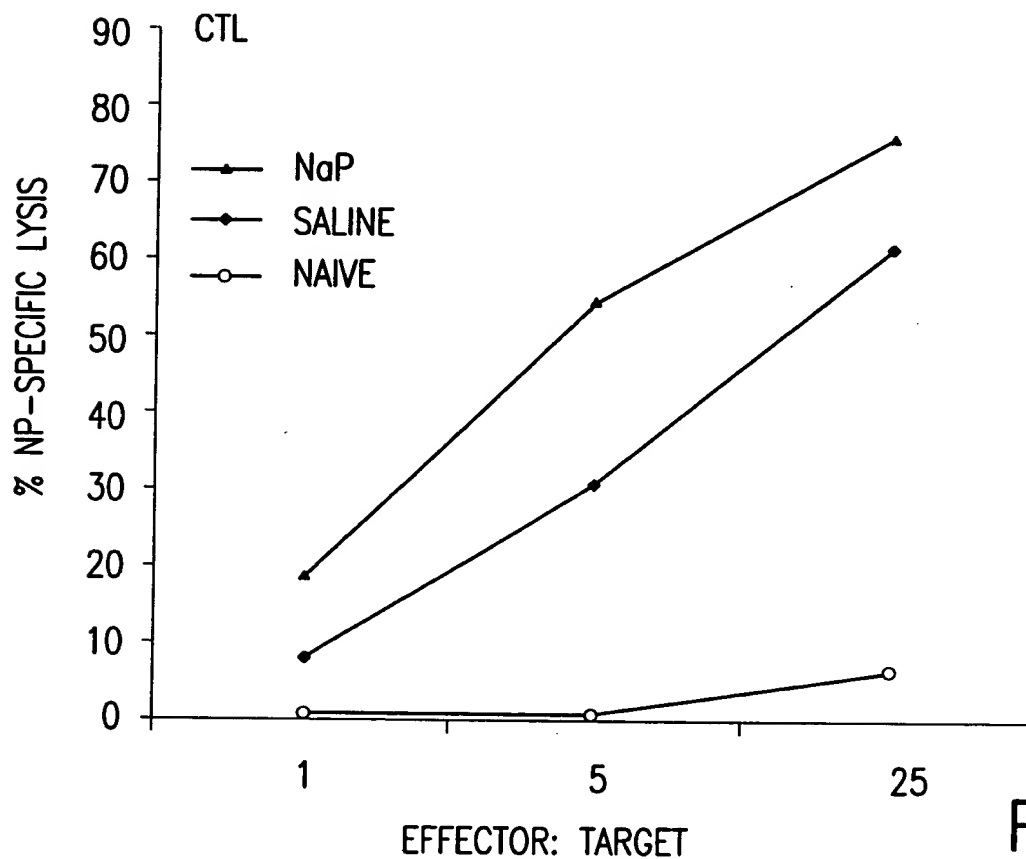


FIG. 7B

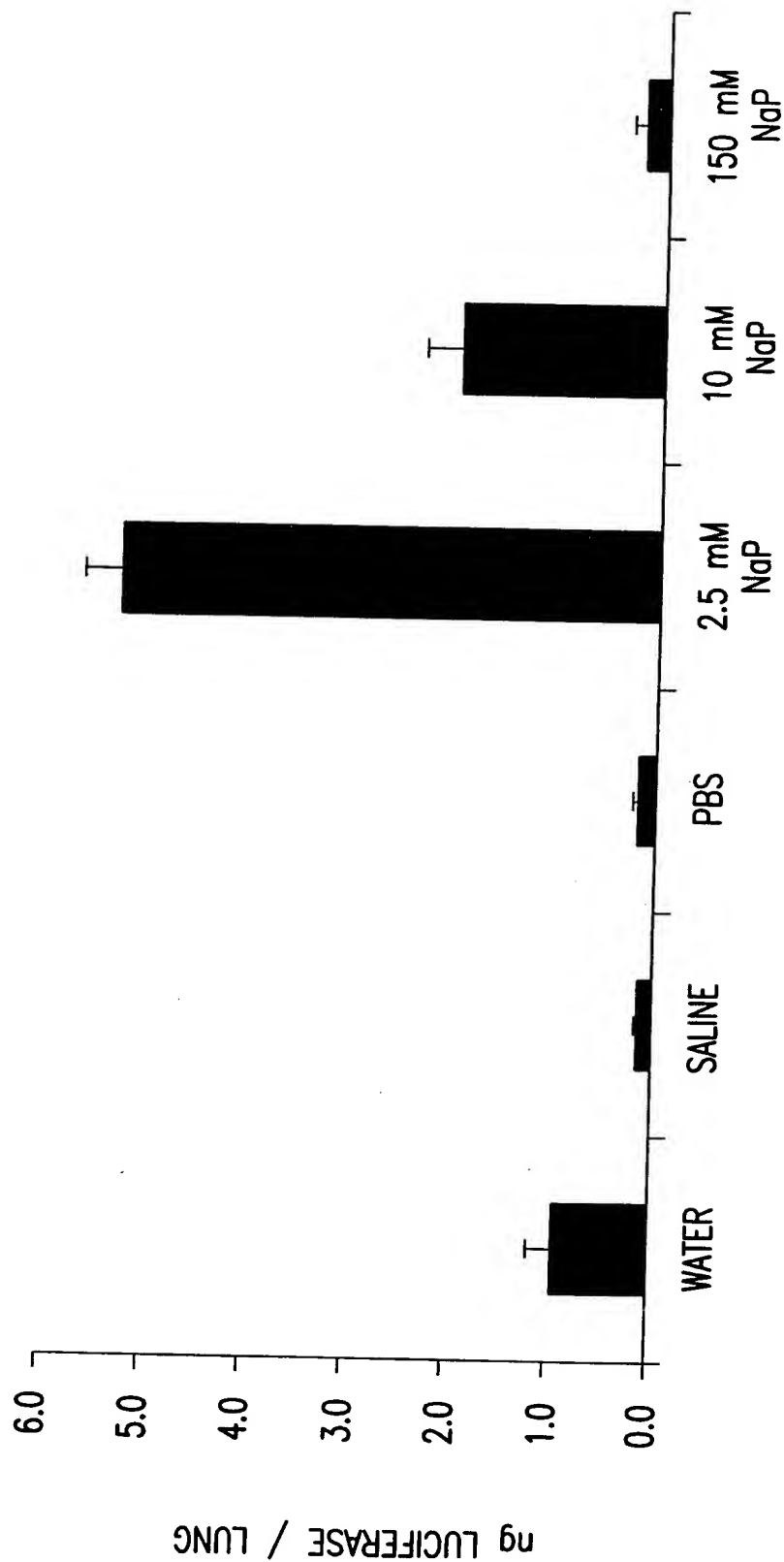


FIG.8

FIG. 9

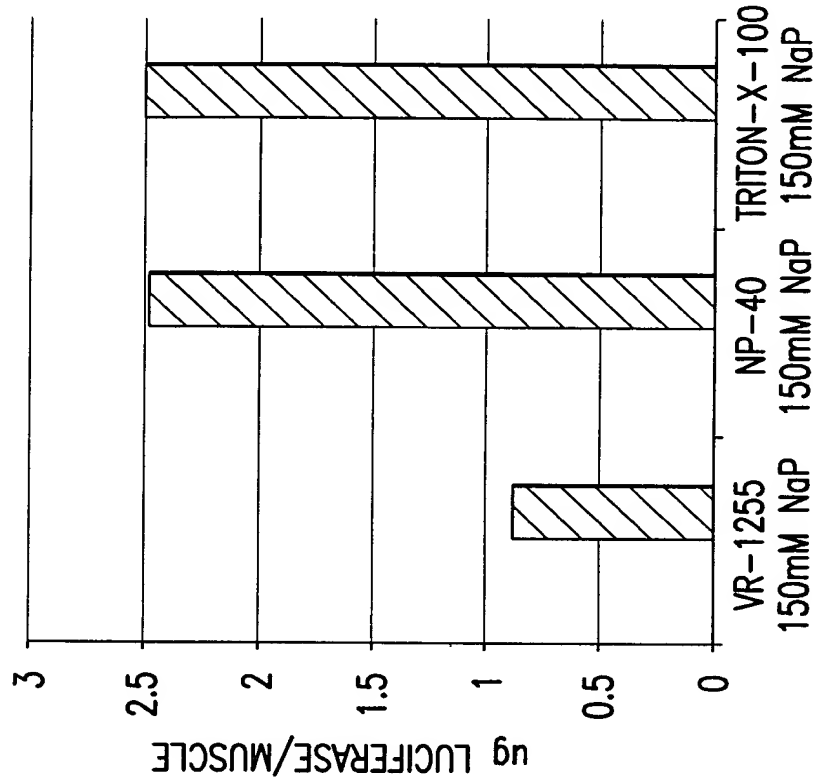
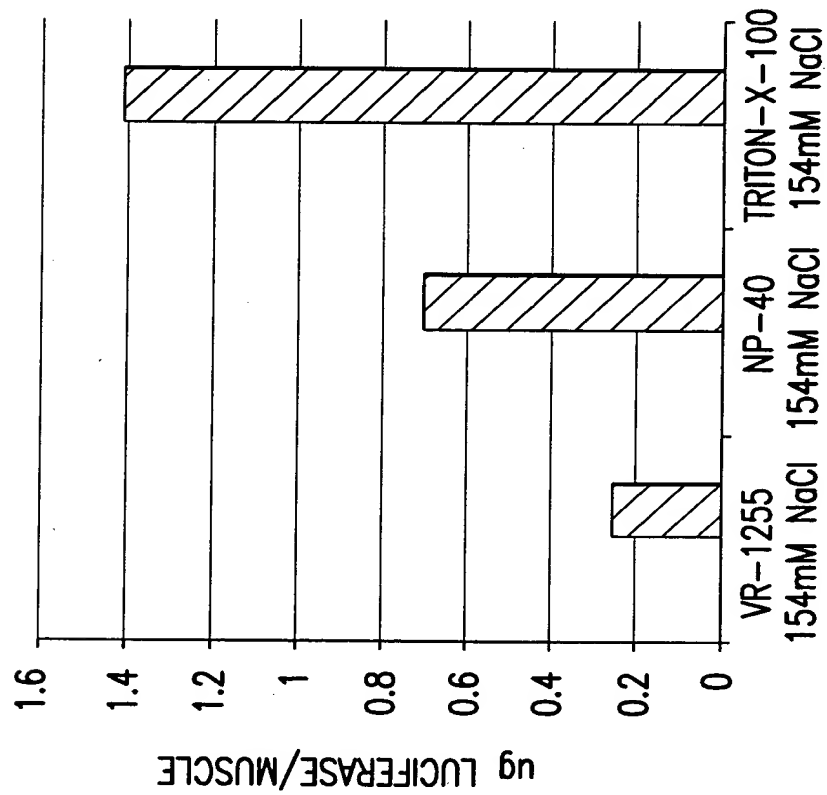


FIG.9

P104	3
TRITON X-10	3
NP-40	3
L81	3
P103	3
P105	3
F108	3
L121	3
P65	4
L31	4
F68	5
L64	5
25R4	5
17R4	5
L92	5
L44	5
L101	5
L61	6
L62	6
25R2	7

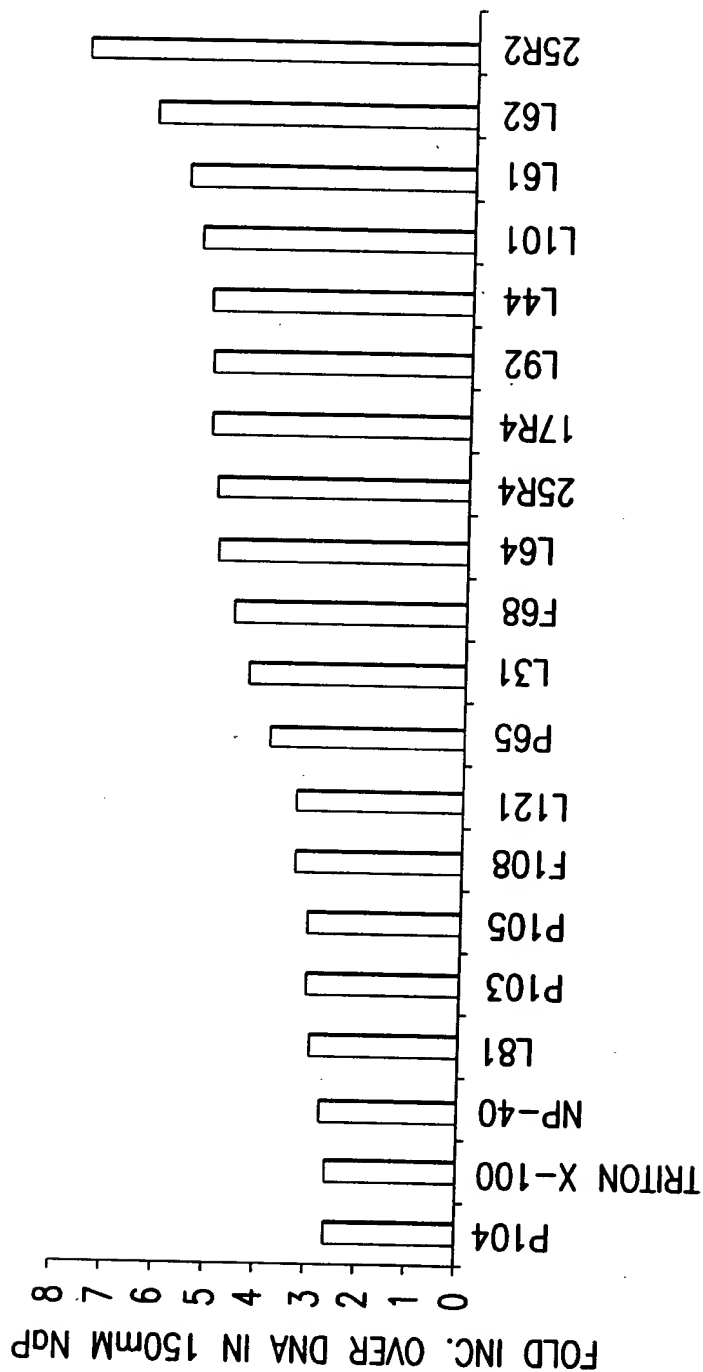


FIG.10

ppl. No. 09/839,574; Group Art Unit: 1646
 kt. No. 1530.0180002/EKS/EJH;
 inventors: Manthorpe *et al.*; Tel: 202/371-2600
 title: Compositions and Methods for in vivo Delivery of
 polynucleotide-Based Therapeutics

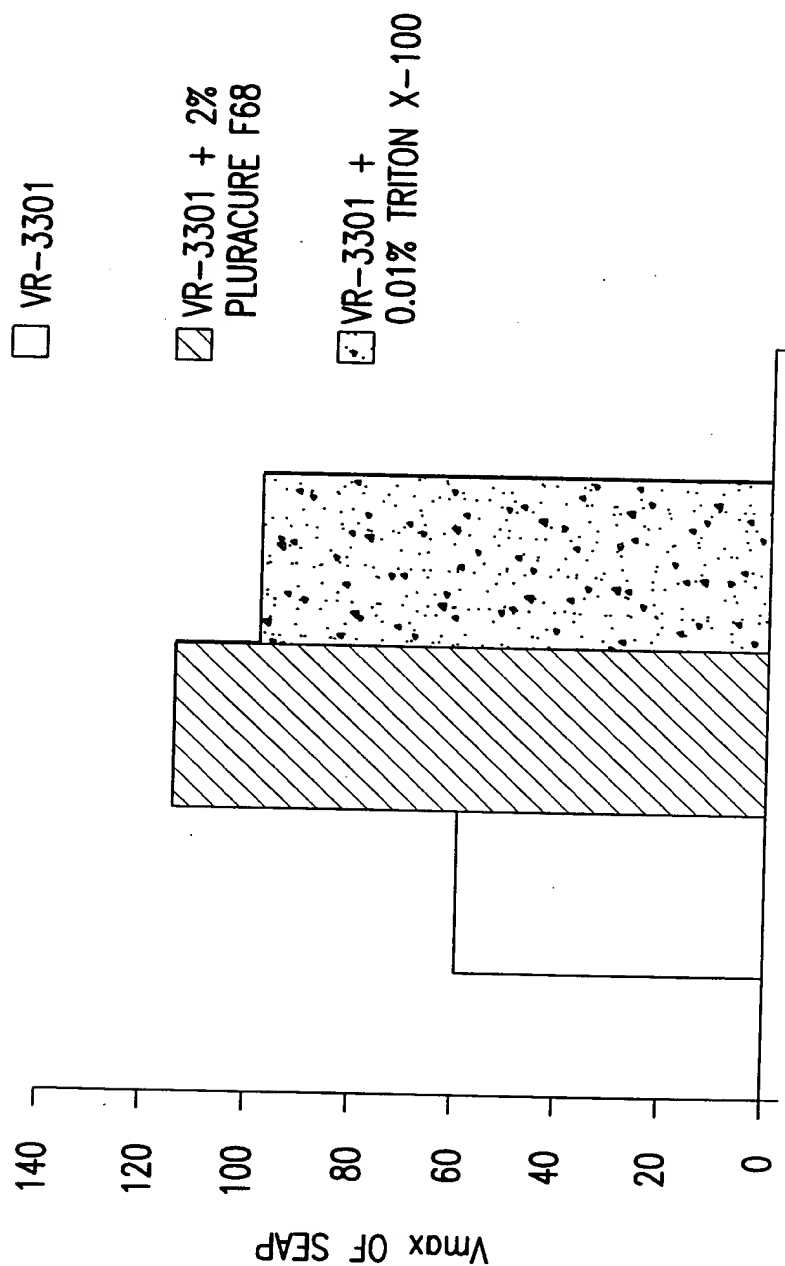


FIG. 11

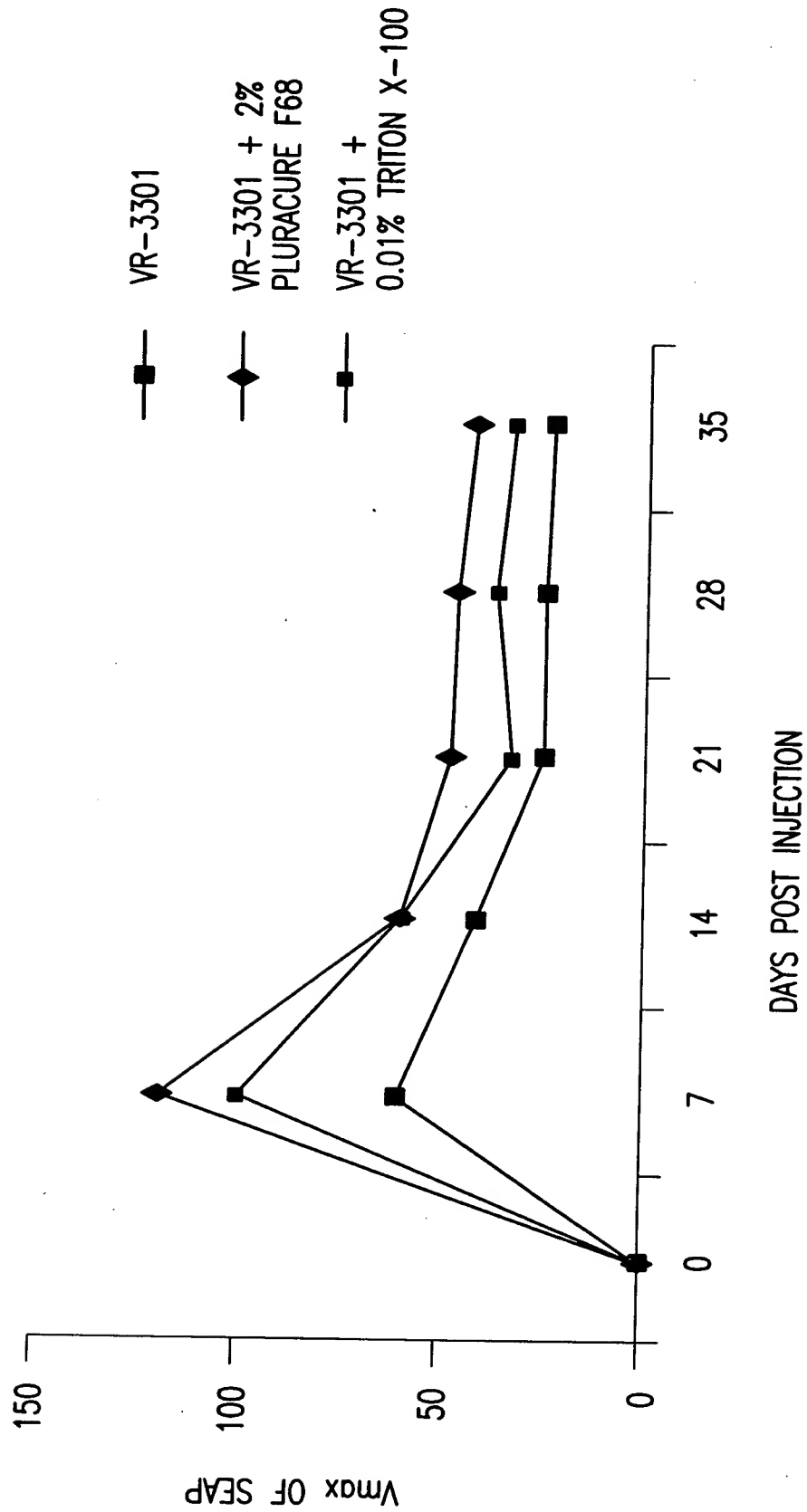


FIG.12

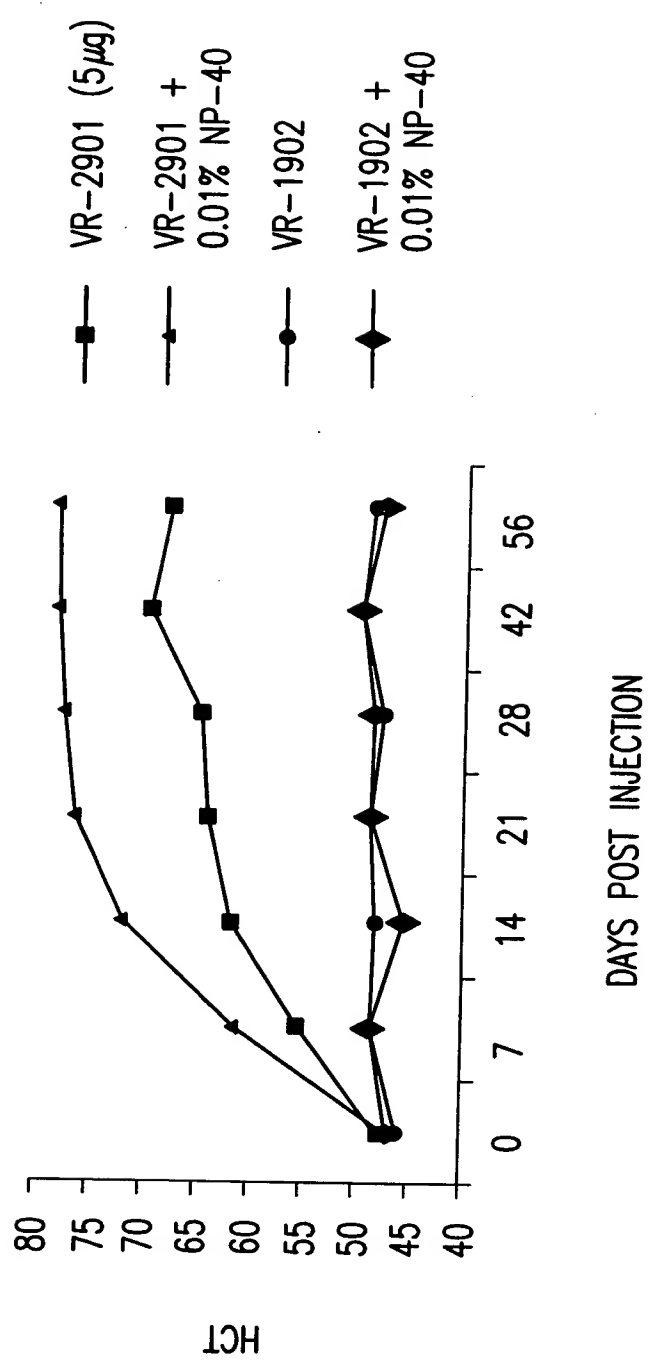


FIG. 13

FIG. 14

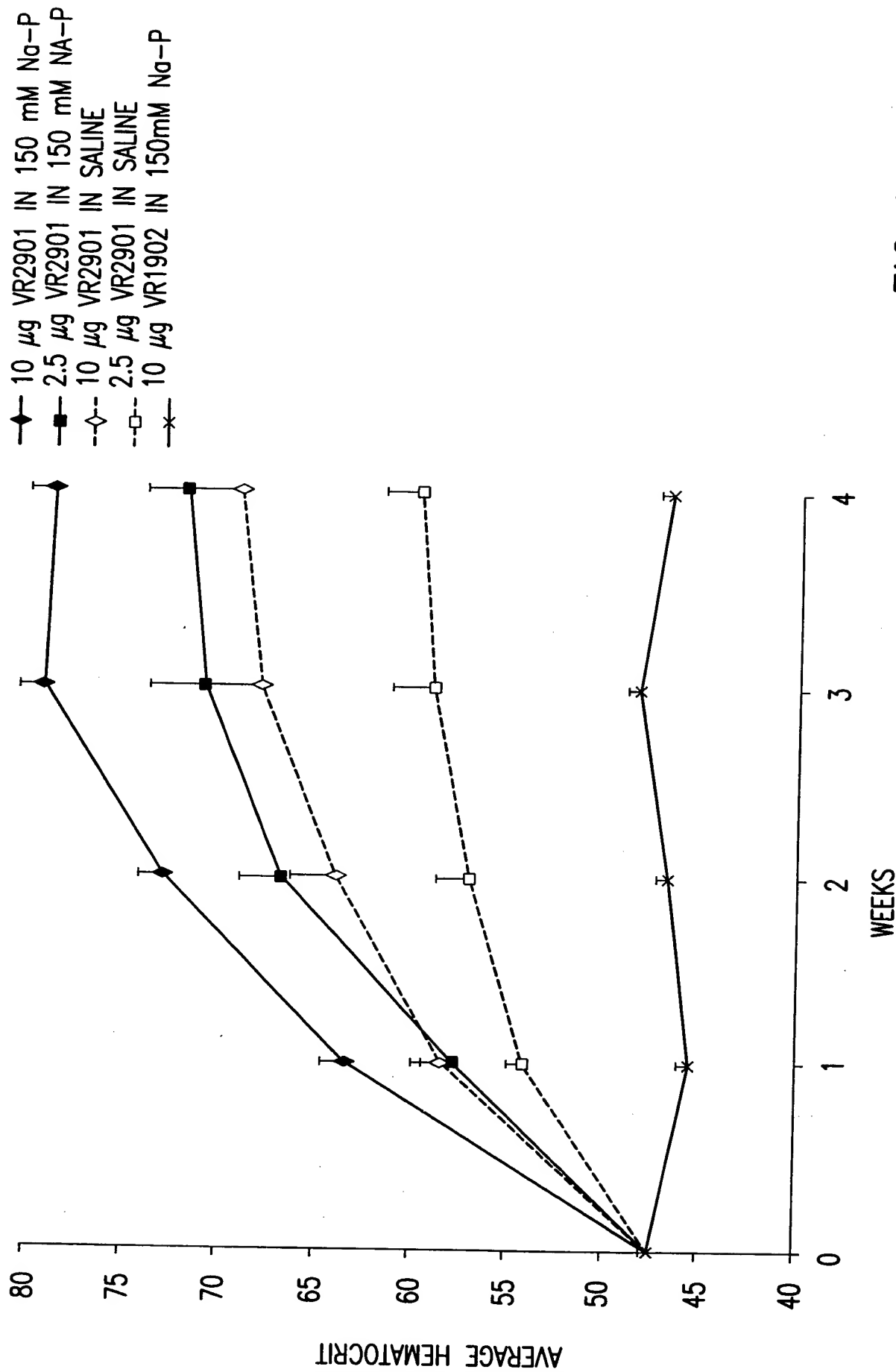


FIG. 14

FIG. 15

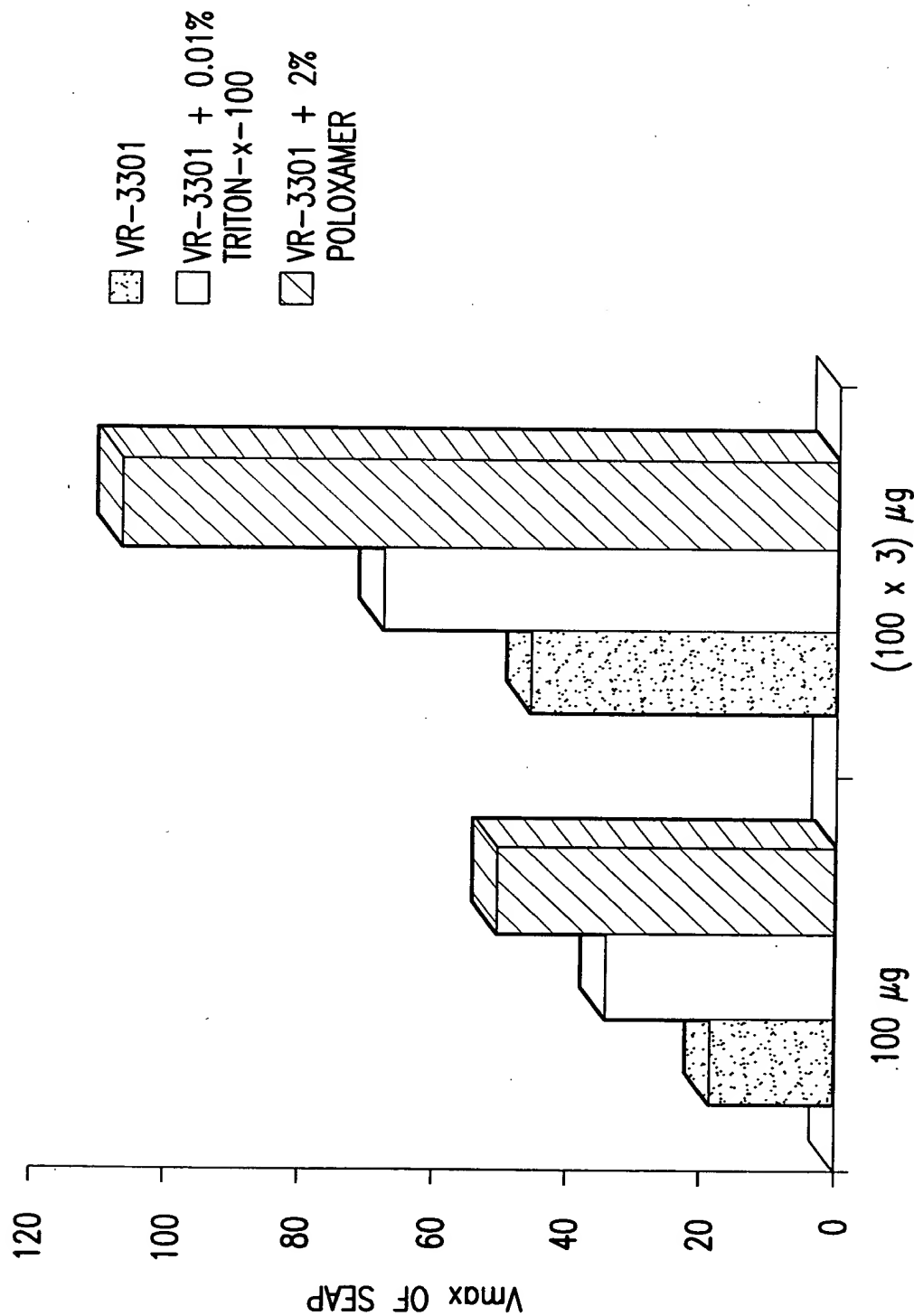
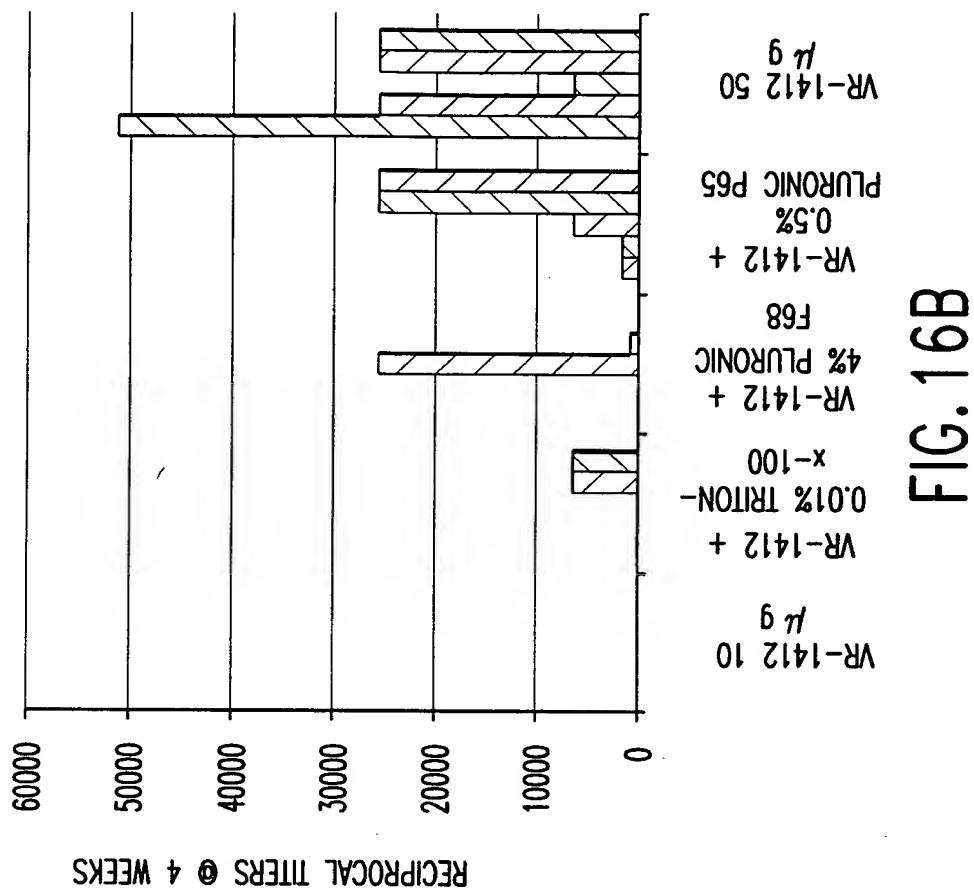
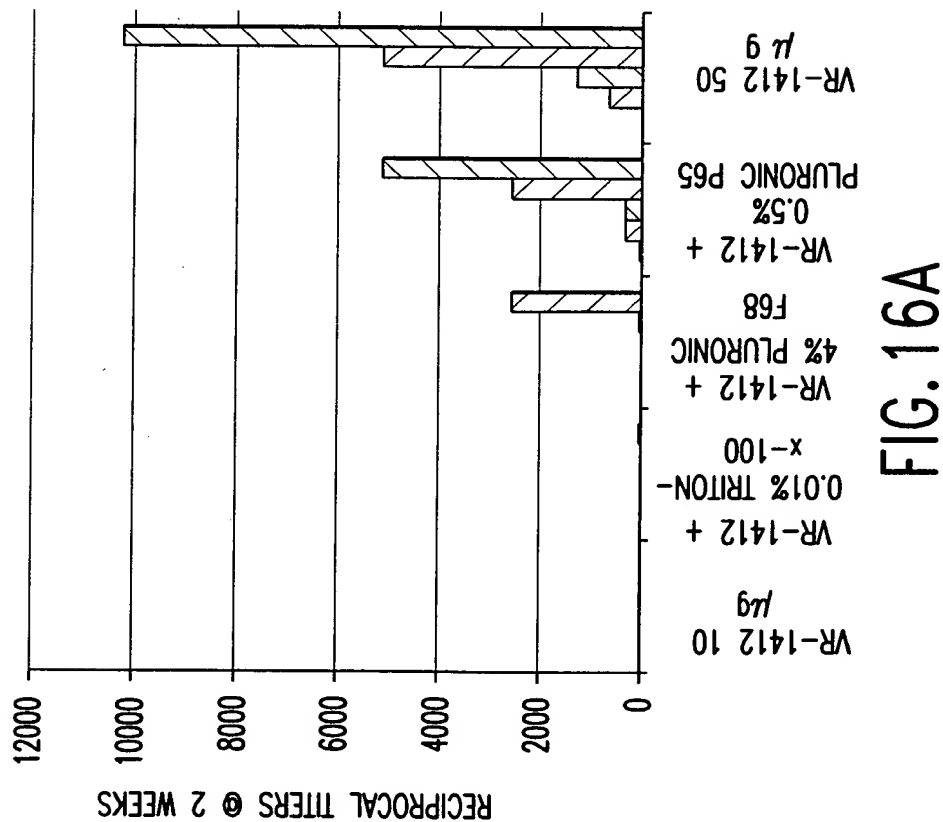


FIG. 15

FIG. 16A



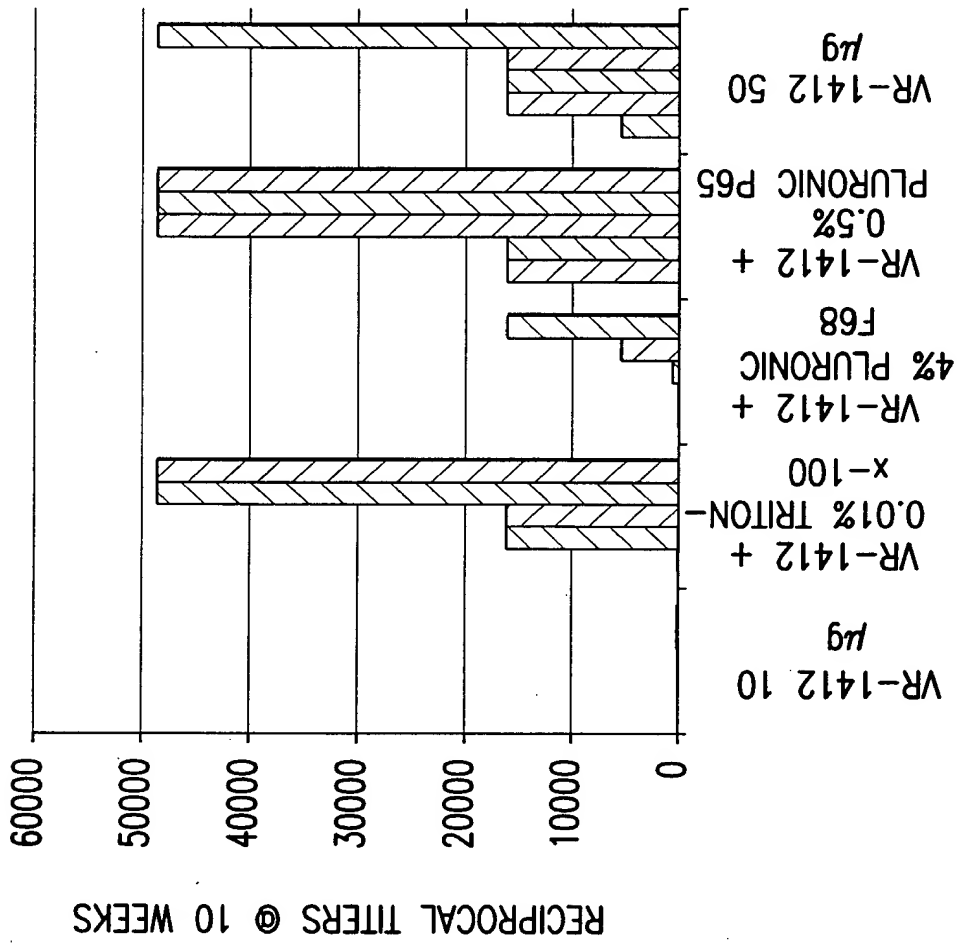


FIG. 16C

FIG. 16C

CTL ACTIVITY IS NOT INHIBITED WHEN pDNA +
POLOXAMER IS ADMINISTERED

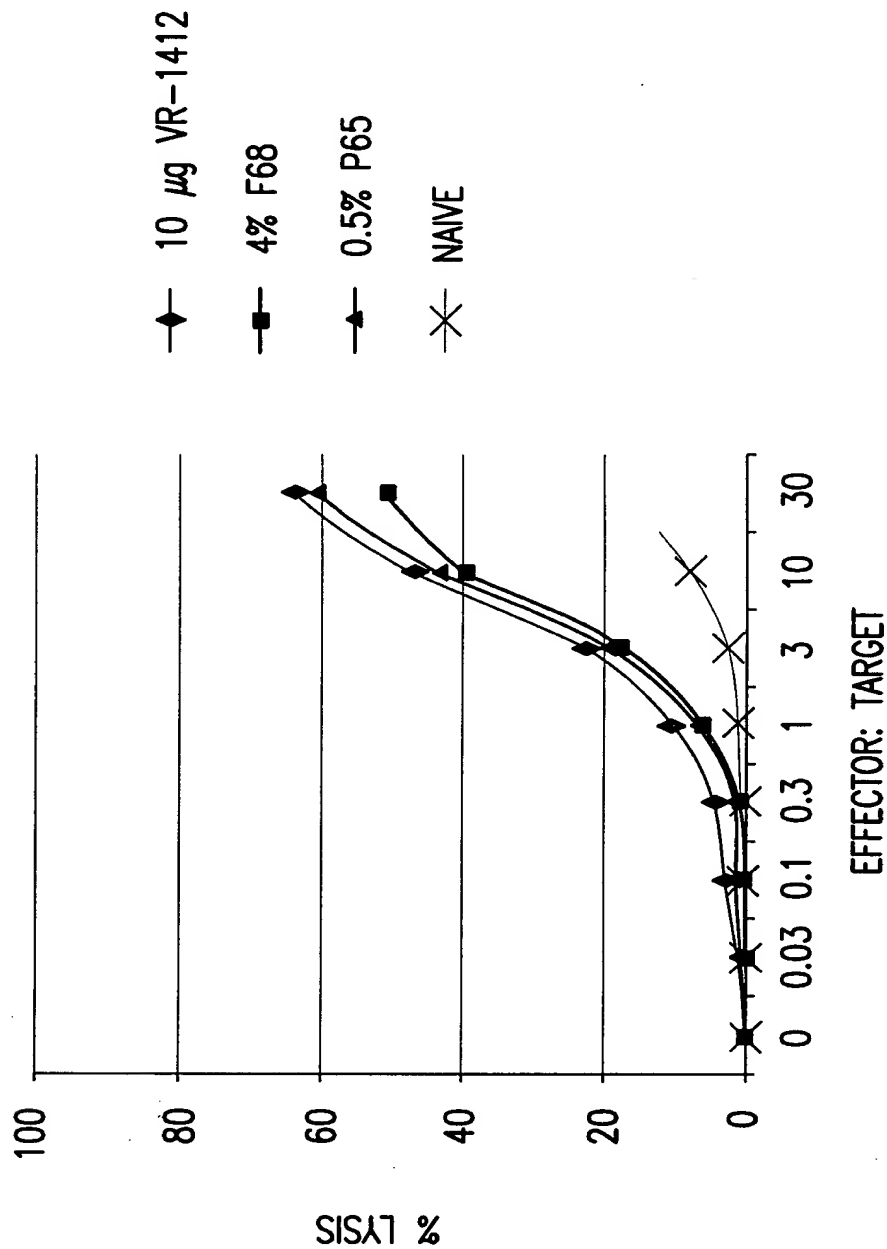


FIG. 16D

CLE EFFECTS ON IFNw pDNA MEDICATED ANTI-TUMOR EFFICACY

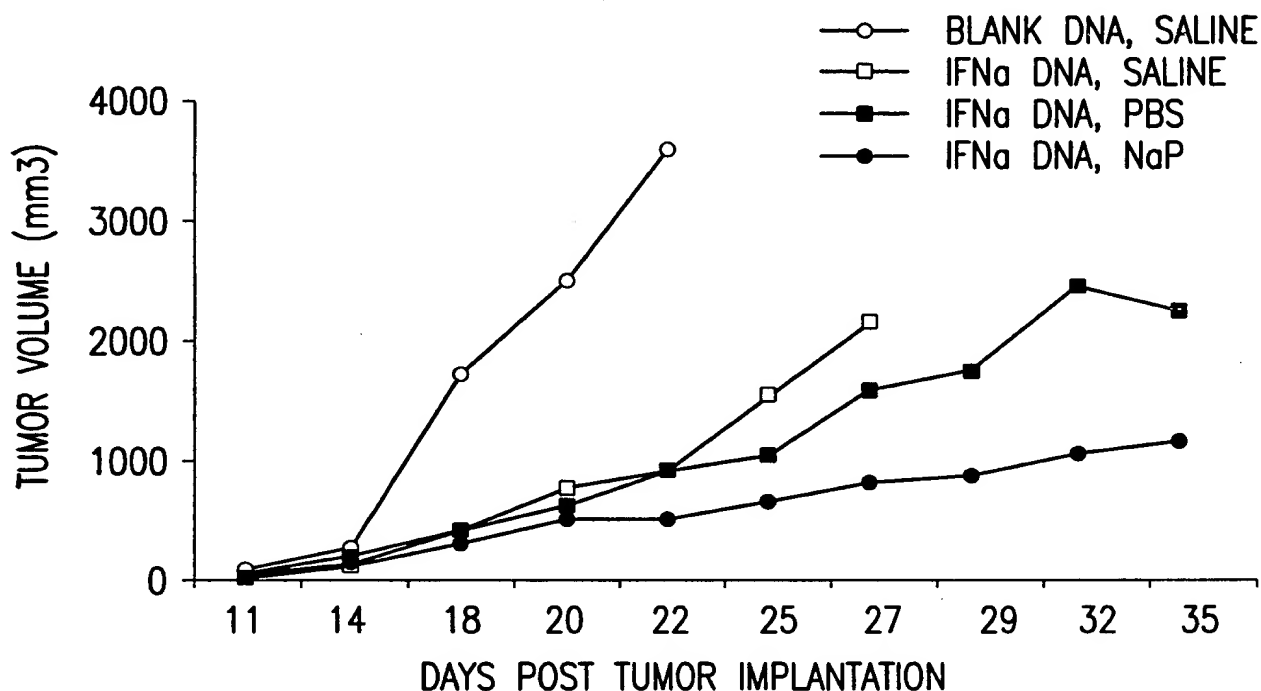


FIG. 17A

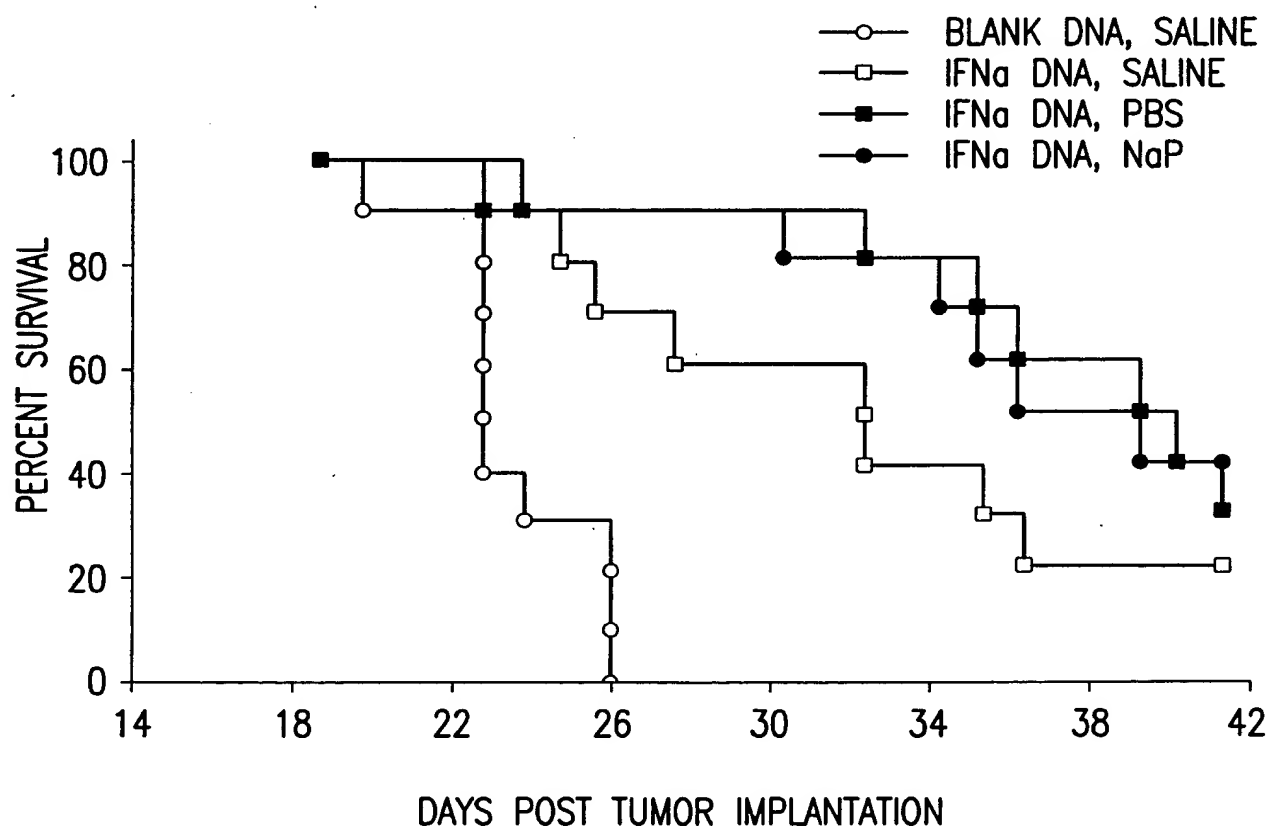


FIG. 17B

09339974-094794

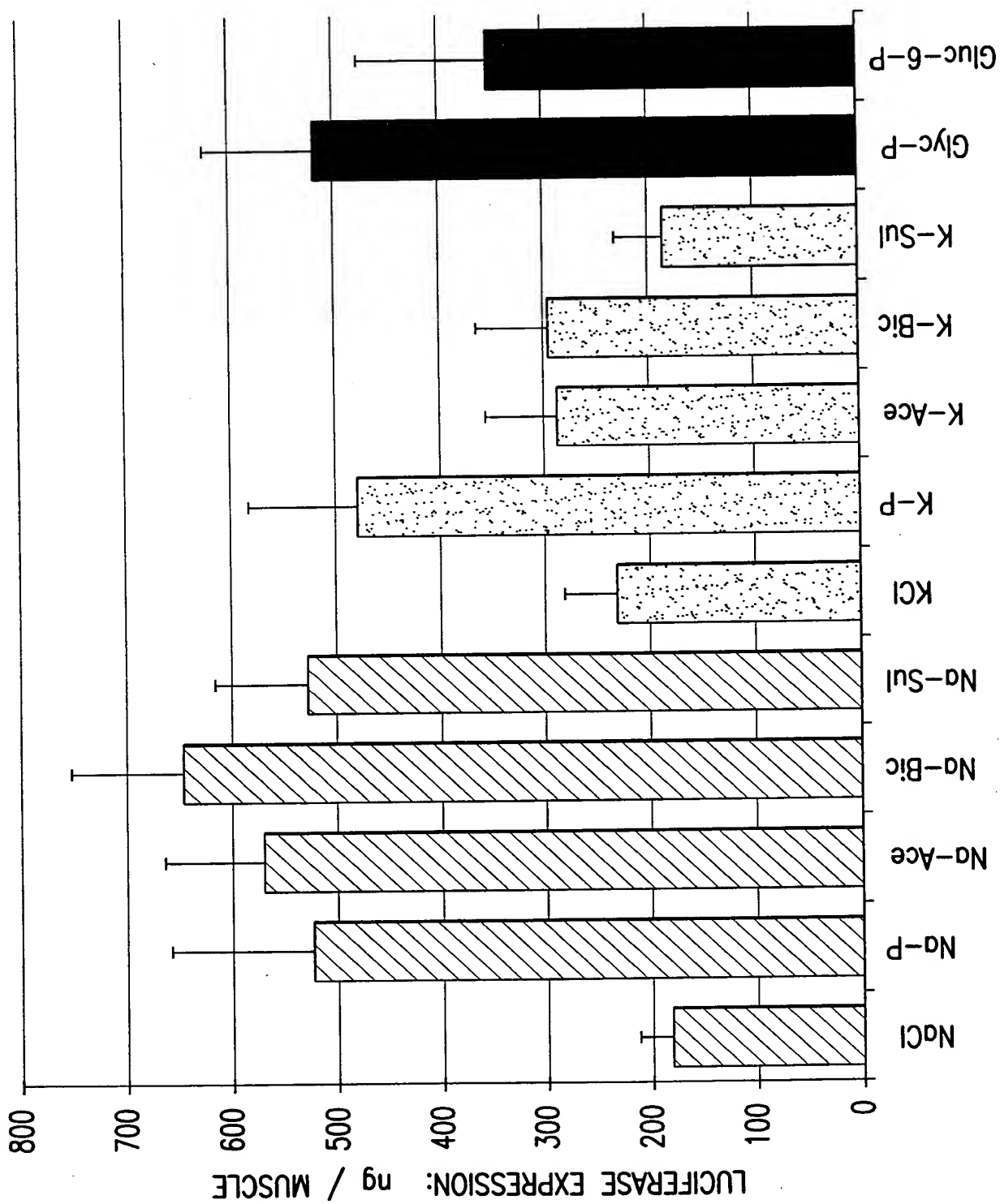
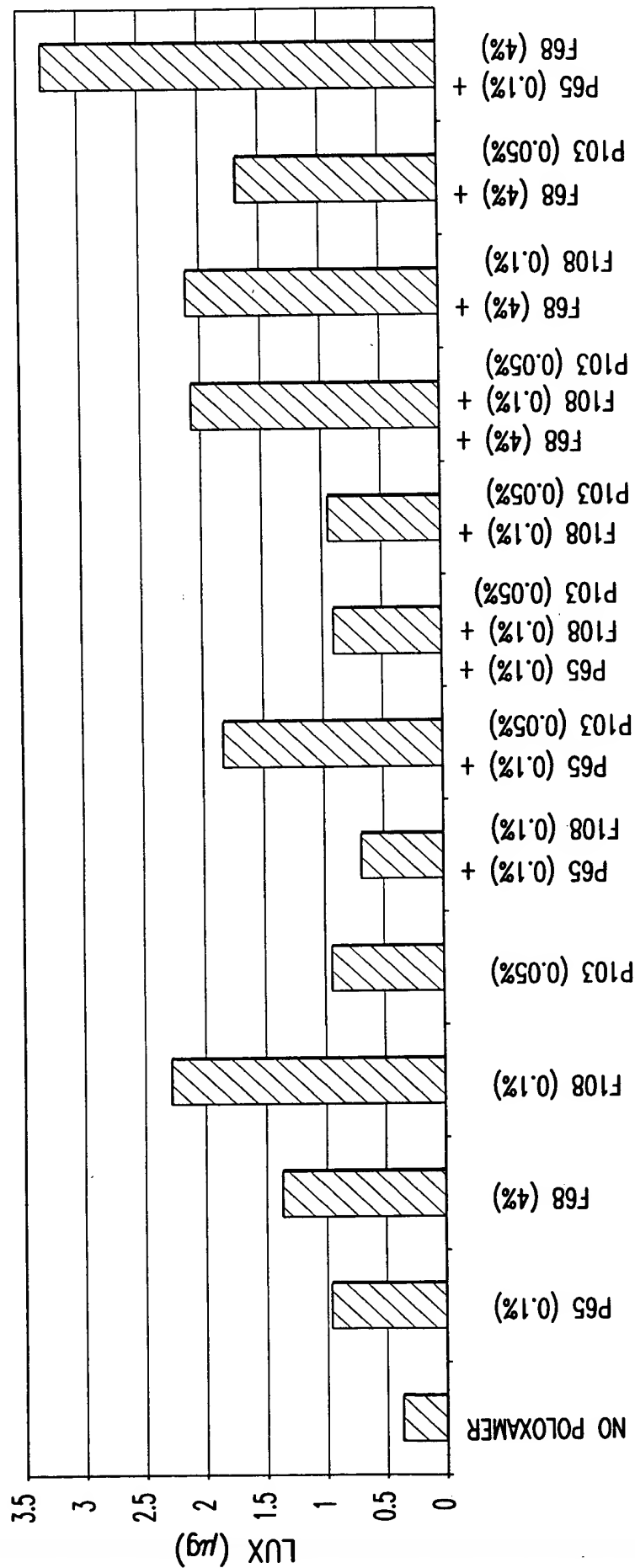
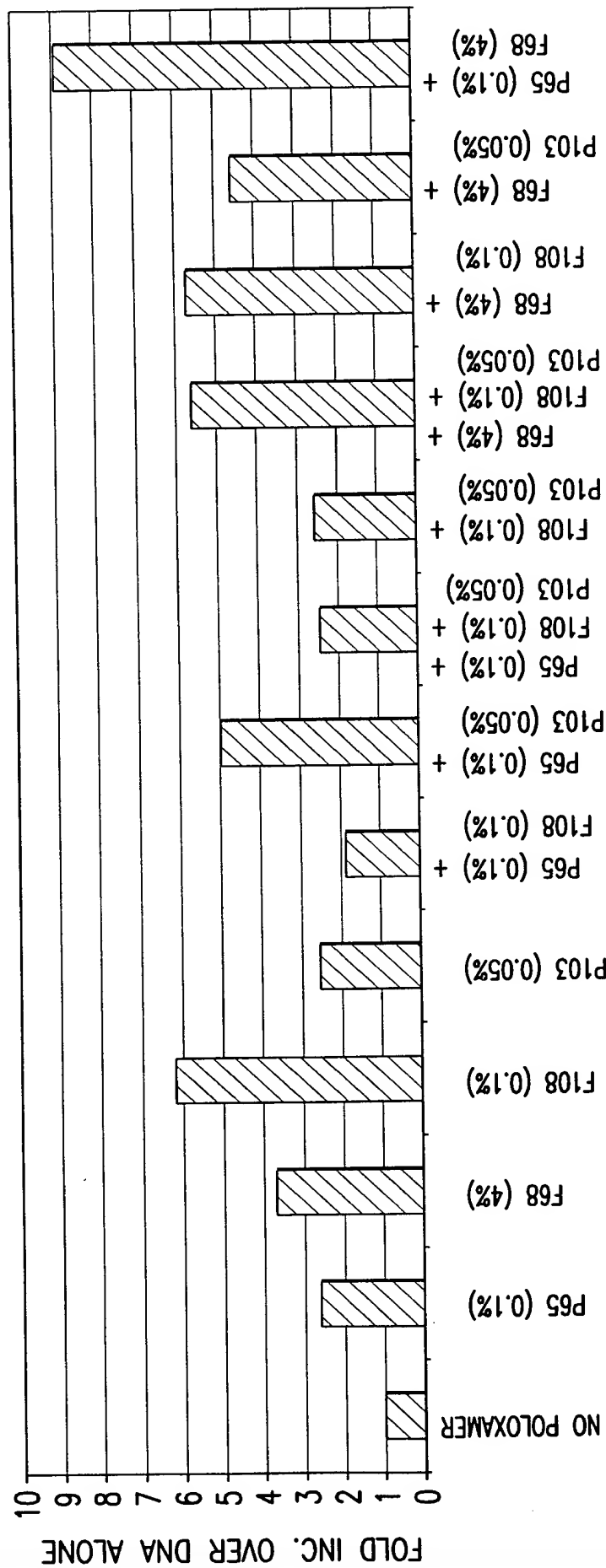


FIG. 18



VR-1255 ± POLOXAMER(S)

FIG. 19A



VR-1255 ± POLOXAMER(S)

FIG. 19B

FOOTPRINT-1256660

DAY 3 LUCIFERASE EXPRESSION AFTER INTRAMUSCULAR
ADMINISTRATION OF VR1255 ± POLOXAMER (F68)

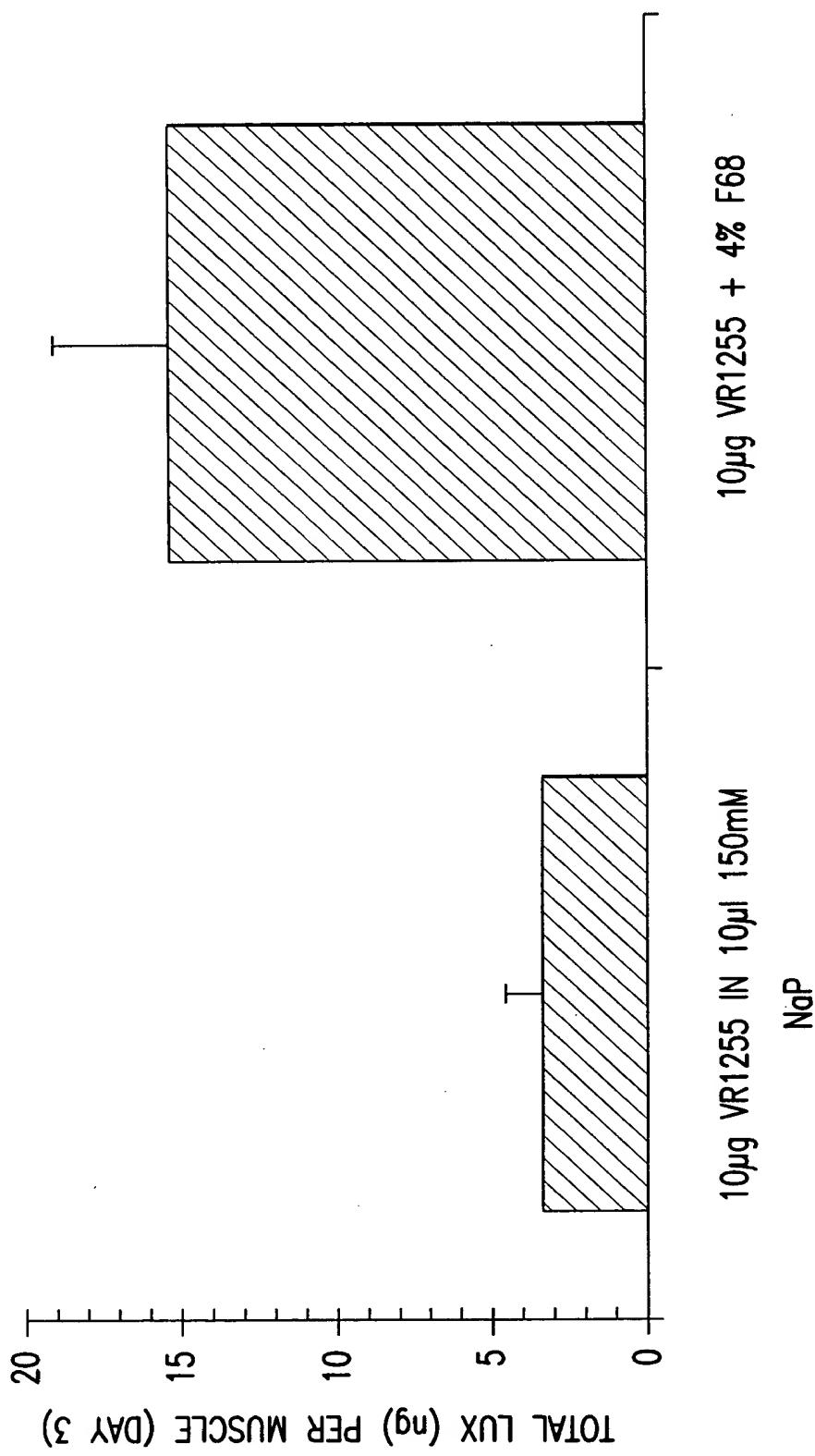


FIG. 20A

DAY 3 LUCIFERASE EXPRESSION AFTER INTRAMUSCULAR
ADMINISTRATION OF VR1255 ± POLOXAMER (25R2)

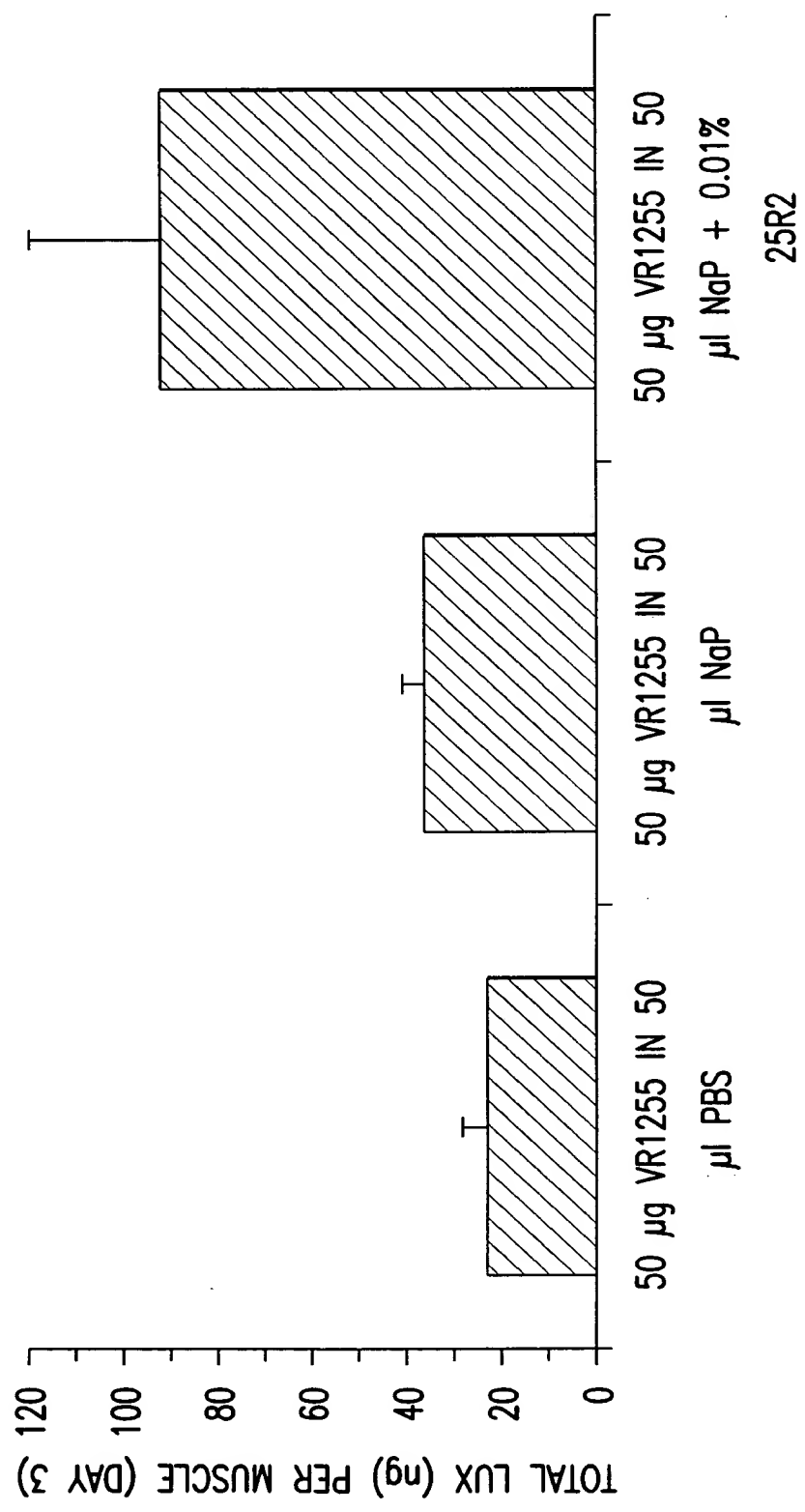


FIG. 20B

HEMATOCRIT LEVELS AFTER A SINGLE DOSE (1 μ g) OF VR2901
± POLOXAMER 25R2

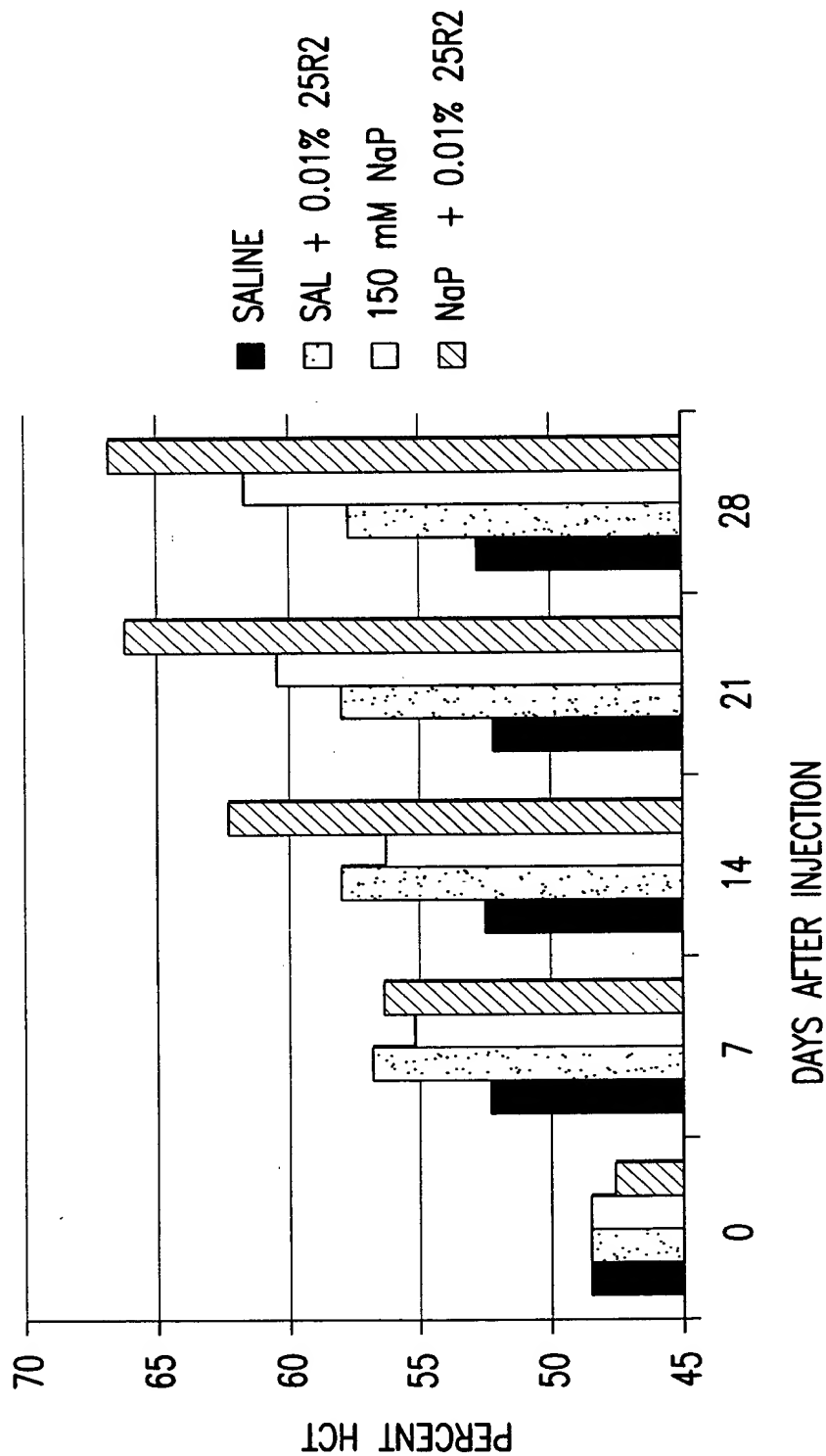


FIG. 21

102180-1256260

HCT LEVELS AFTER ADMINISTRATION OF VR2996 + POLOXAMER F68

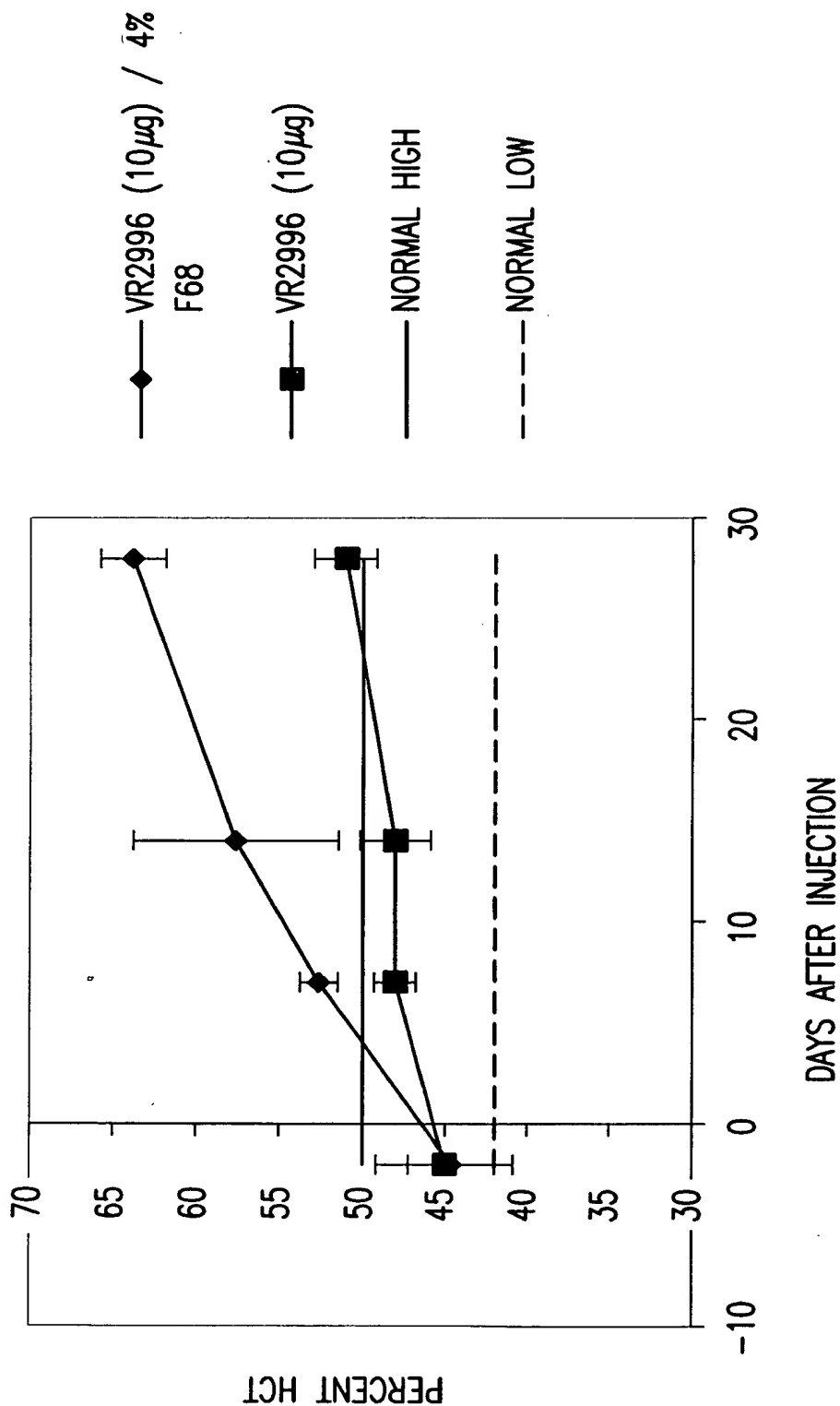


FIG. 22

202,371-2600

DNA DOSE RESPONSE AFTER INJECTION OF VR1255 ± POLOXAMER

(25R2)

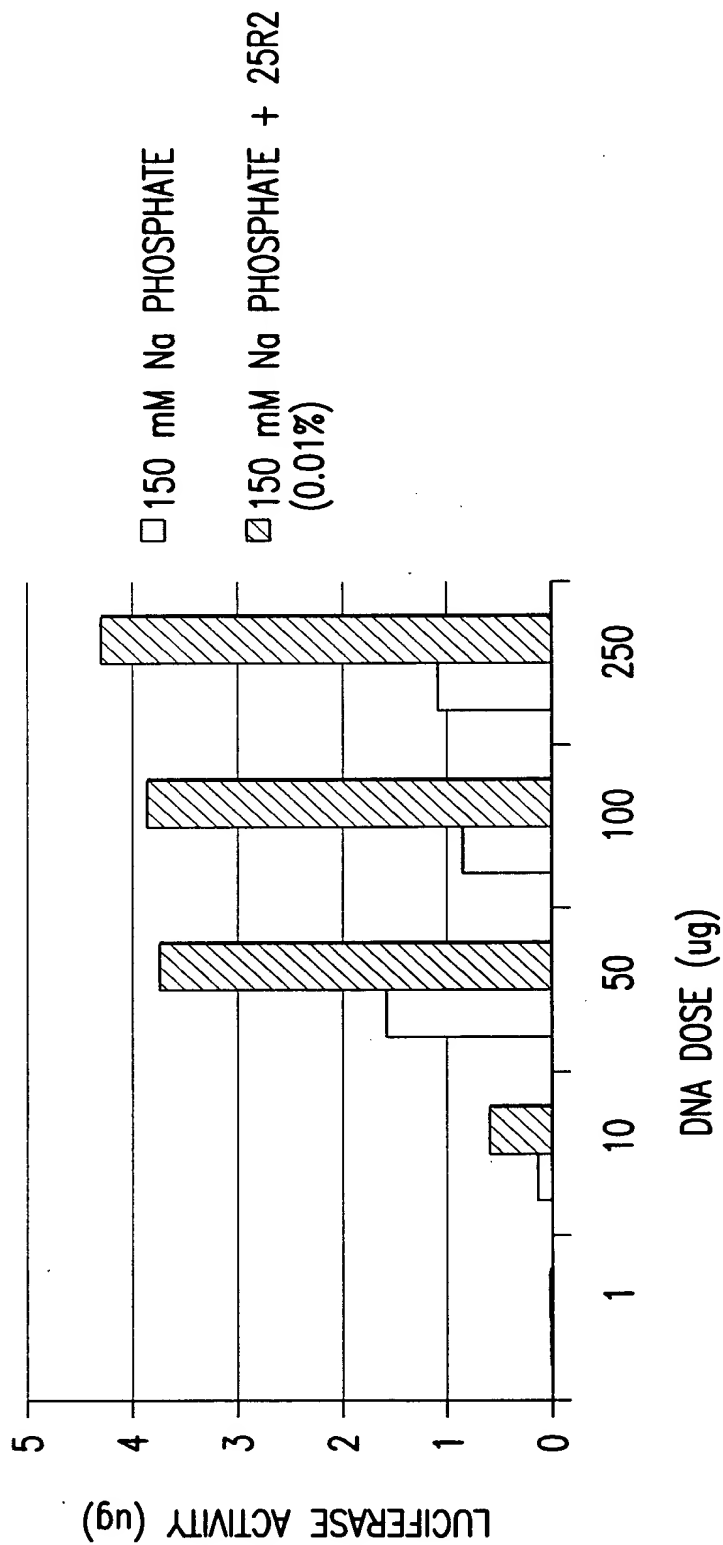


FIG. 23

TIME COURSE OF EXPRESSION AFTER DELIVERY OF
VR1255 ± 25R2 (0.01%)

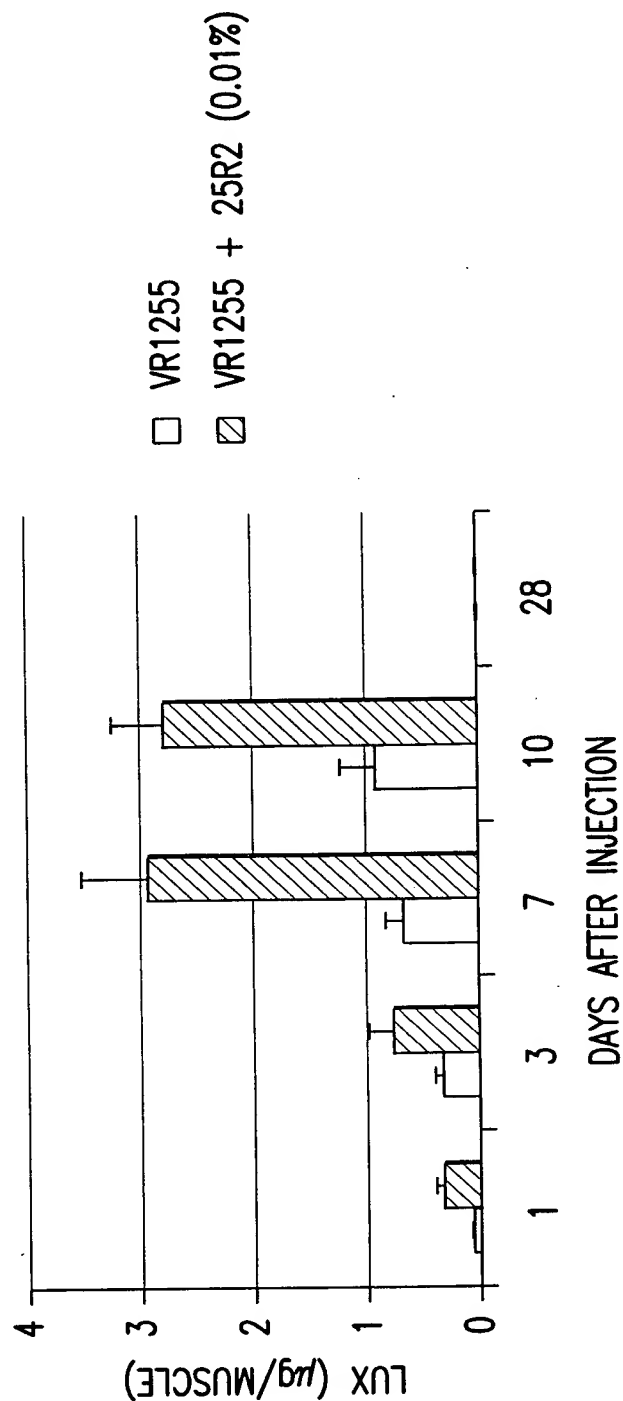


FIG. 24

TRANSFECTION OF MOUSE RECTUS FEMORIS WITH VR1412 (pBgal) \pm
 POLOXAMER 25R2 (0.01%)

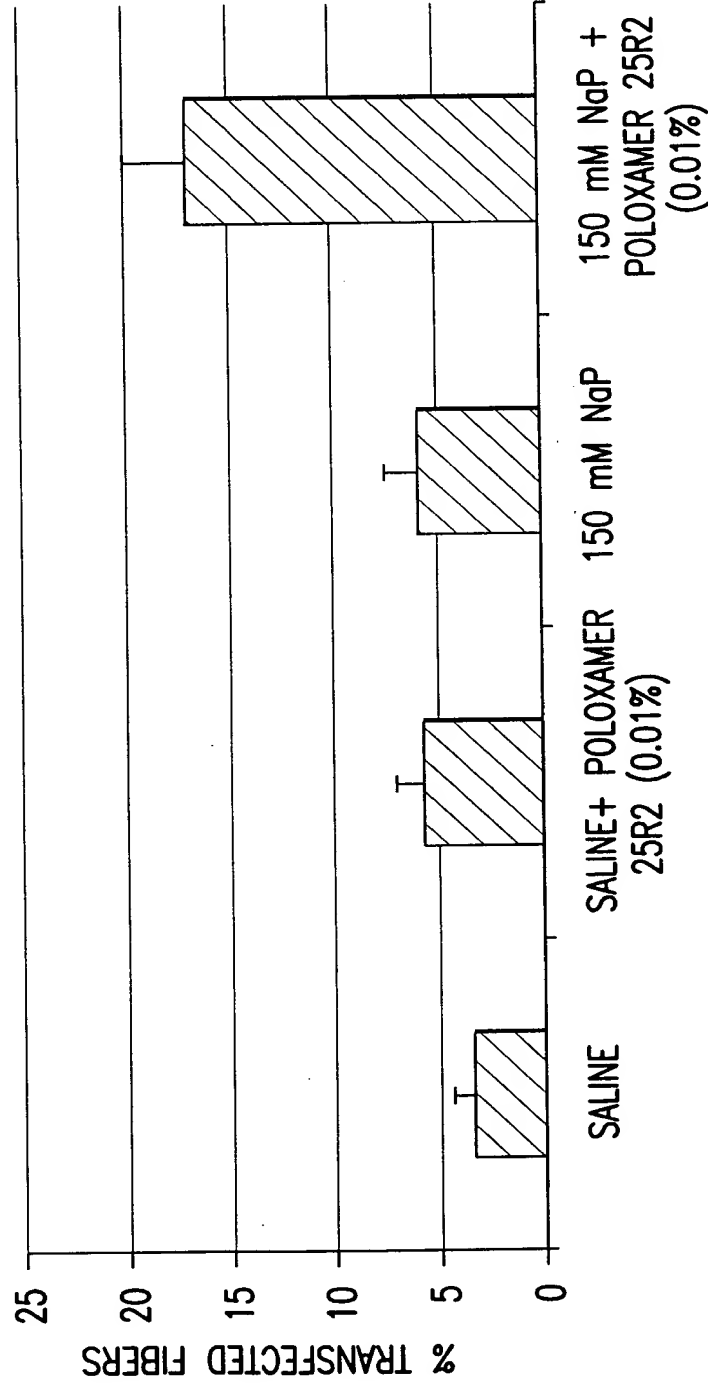


FIG. 25

Appl. No. 09/839,574; Group Art Unit: 1646
Dkt. No. 1530.0180002/EKS/EJH;
Inventors: Manthorpe *et al.* ; Tel: 202/371-2600
Title: Compositions and Methods for in vivo Delivery of
Polynucleotide-Based Therapeutics

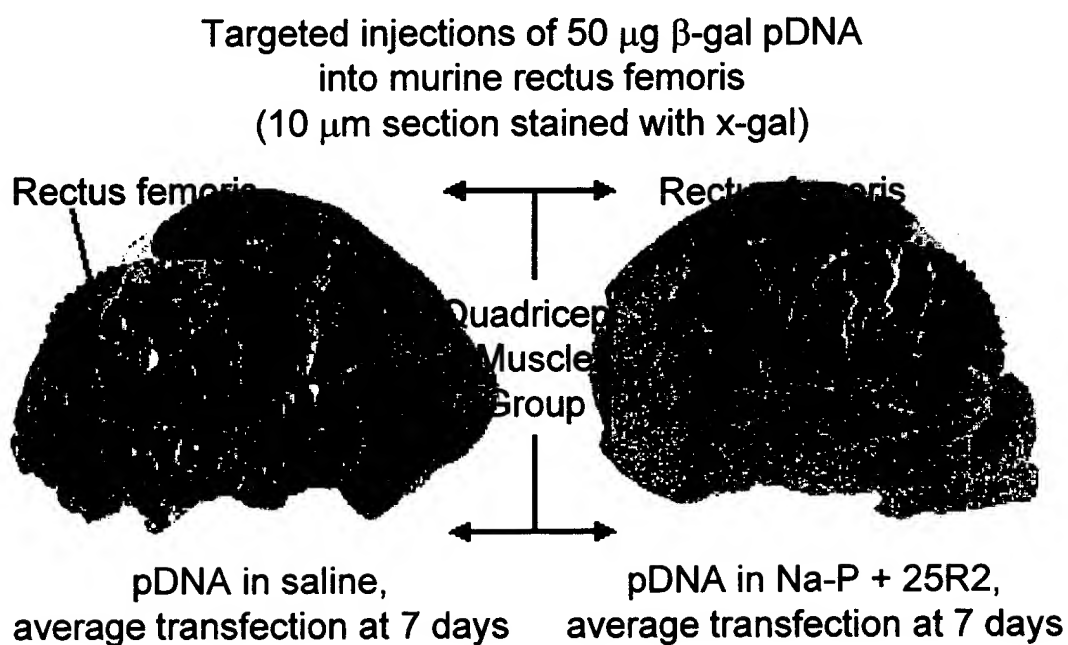


FIG.26